A MANUAL of HOME BUILDING

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A Manual of HOME BUILDING

Edited by
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441 Lexington Avenue New York City

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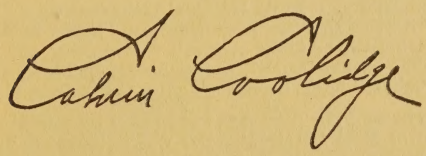
"I HAVE been much impressed during the past three years with a widespread interest and co-operation in the educational movement for Better Homes in America. The home has been and ever must be a source of profound influence and inspiration in the lives of all citizens. It plays the chief role in the development of the children of our nation for stability and uprightness . . . To raise the standards of the American home is, therefore, a substantial contribution to national well being."



From *Everyman's House*

FOREWORD

"TO RAISE the standards of the American Home"—to which President Coolidge has referred as "being a substantial contribution to national well being"—is the purpose of the National Demonstration "Model" Homes Campaign. Under the supervision of the Home Owners' Service Institute, the campaign will aid in creating further widespread interest and cooperation in the educational movement for better homes and better building in America.

This booklet, "A Manual of Home Building," is the manual of the campaign. As such, it becomes a guide to certain recognized and established standards for the specifying and use of quality materials and equipment, coupled with good architectural planning and proper construction methods for the safeguarding of the all important investment in a new home —whether it be purchased outright, or built by the individual seeking home ownership.

If you are preparing to own your own home, study this manual; endeavor to visit and carefully inspect one or more of the national demonstration "model" homes, and safeguard your own home thereby. But whenever in doubt, as your dream home progresses, consult an architect or a realtor-builder.

A well-known editor, Hugh Fullerton, writing recently in Liberty Weekly said: "The United States is founded upon the home. Every new home built is a visible expression of the love of country and the faith in ideals upon which the nation stands. A nation building upon such foundations cannot be shaken."

When you build or buy a home you owe it to yourself and to the nation to see to it that your dwelling is a good house—a "better home." A house improperly planned and built with inferior materials and equipment is a menace. Such a house represents false economy from the start, usually traceable to lack of knowledge and foresight. In the end, without exception, it means heartaches; with financial loss to its owner because of heavy repair and upkeep bills (being poorly constructed), rapid depreciation and low re-sale value. Such a house represents an economic loss to the nation, and as such is a real menace.

According to Franklin D. Roosevelt, Chairman, American Construction Council, "the average person does not get suitable value for his money in buying or building a home." By following the standards of quality and construction set down in these pages for your guidance, as a home seeker you may be assured of getting the dream home desired, built of the right materials and equipment—all nationally advertised and trade-marked, for known value—as manufactured and merchandised by recognized leaders in the industry, available everywhere at the lowest possible prices commensurate with good and lasting value.

One of the best ways to teach this subject of comparative values and qualities in home making is by actual example. In its National Demonstration "Model" Homes Campaign the Home Owners' Service Institute is showing real "better homes" being constructed and by actual demonstration to the home seeker is interpreting and explaining the sound reasons for everything that is done during the planning, building, equipping, decorating and furnishing of each "model" home in various cities throughout the United States.

Each demonstration home built during the campaign by a realtor-builder (member of the National Association of Real Estate Boards) will be covered by the Home Owners' Safeguard Policy, to establish and certify as to its known value. Each will be built following one of the architectural designs illustrated in this manual, and as specified herein.

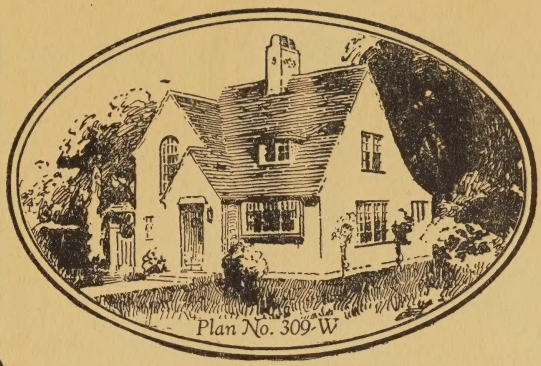
You cannot afford to take home owning chances, large or small.

Turn over a page, and read. Be guided and safeguarded by the most expert and experienced home planning and home building authorities in America.

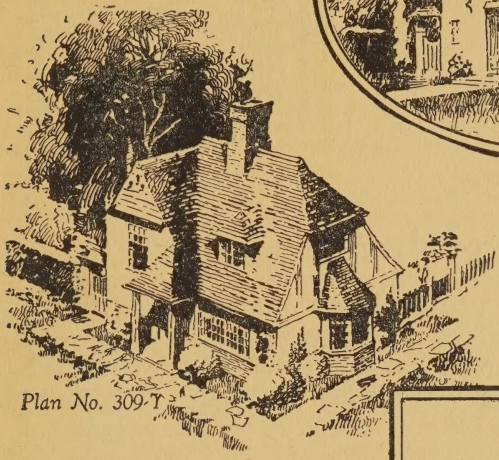
J. Porter Moore

President,
Home Owners' Service Institute, Inc.

This attractive house of stucco reflects English architectural feeling, with its high-pitched roof and peaked gable ends. An exceedingly popular design, Americanized and modernized in every respect. (Plan No. 309-W, at right.)



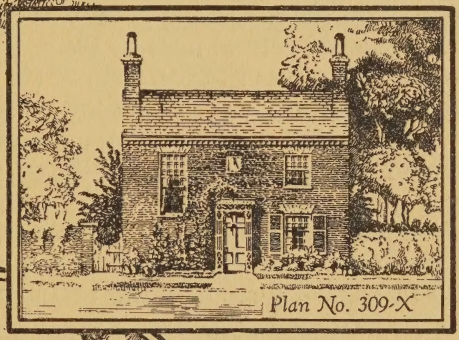
Plan No. 309-W



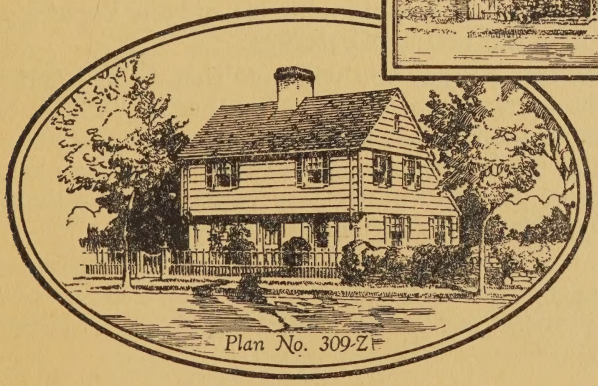
Plan No. 309-Y

This type of half-timbered Swiss cottage planning is becoming increasingly popular. Entrance detail and side bay windows are features. Stucco with the brick and half-timber treatment create an effective exterior. (Plan No. 309-Y, at left.)

There is no more charming architecture for sturdy homes than the Georgian Colonial of brick. This house would stand out from its neighbors in any locality. The high end chimneys are distinctive. (Plan No. 309-X, at right.)



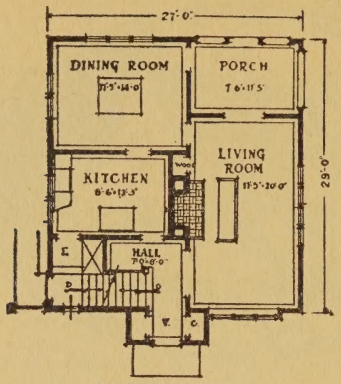
Plan No. 309-X



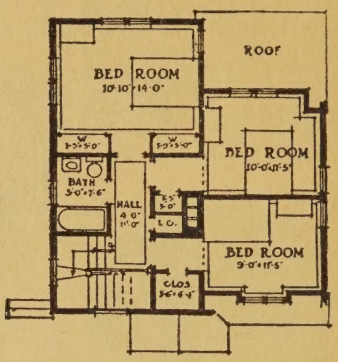
Plan No. 309-Z

The New England Colonial design is probably the most popular of all. This house is much like the John Howard Paine place on Long Island, N. Y., which inspired him to write the old song, "Home, Sweet Home"—wide wood siding or shingle exterior. (Plan No. 309-Z, at left.)

First series of houses built in 1926 National Demonstration "Model" Homes Campaign. Nos. 309-W, 309-X, 309-Y, 309-Z. Floor plan, description on next page.



FIRST FLOOR



SECOND FLOOR

One of America's Most Popular Homes

This is one of the most popular house plans ever designed, the room arrangement being ideal for convenience, comfort and economy of construction, almost square in its dimensions. Plan No. 309-W as shown on the preceding page, was originally designed along English cottage architectural lines by Oscar T. Lang, A.I.A., of Minneapolis, Minn., who was awarded one of the prizes in the 1926 "Own Your Home" Expositions architectural competition, as a result.

Three other exterior styles of architecture, as also shown on the preceding page, have been created to be built using the same floor plan and general room arrangement as illustrated above on this page—Georgian Colonial, Swiss chalet and New England Colonial. John Floyd Yewell and Arthur Bates Lincoln, architects, of New York City, have designed these new and beautiful exteriors.

By studying these four designs you will note that slight interior changes include front entrances with respect to porch platform or vestibule, the locating of the fireplace in the Georgian Colonial house on the opposite side of the living room, the slightly larger floor area in the Swiss chalet type provided by the bay window in the living room, and window locations in the sun porch at the rear.

Each of these houses is quite impressive in character. There are six primary rooms, as the floor plan indicates. The basement is fully excavated. Any one of these four designs would be suitable for either city or country.

Full directions for obtaining complete blue print working drawings and specifications, ready to build from, will be found on page 44.

The "Guessing Days" Are Gone

—the demand for advertised products in home building and equipping is the new safeguard

"BUILDING materials, like everything else in the world, are of two kinds—the good and the bad—but there are many kinds of goodness." Robert Taylor Jones, of Minneapolis, Technical Director, The Architects' Small House Service Bureau, Northwestern Division, is the authority for this statement. "Every one of the common materials is represented by an endless array of qualities ranging all the way from the best to the worst, and the security of savings and the satisfaction of mind depend upon which particular class the home builder gets into his home."

To buy the most expensive kind is not necessary. To build soundly and well, and economically, it is necessary to use good materials and equipment, of the standard class, nationally advertised, trade-marked, and available to all at moderate cost.

Mr. Jones has made this further significant statement:

"If a manufacturer thinks enough of his material to stamp his name upon it. . . . you may use his material with confidence." The advertised trade mark is your safeguard, eliminating all "guess work."

Such materials and equipment, their proper uses and their utility features, are described in this little manual. The good have been carefully separated from the bad, the standard from the nondescript, for the building of the homes in the National Demonstration "Model" Homes Campaign—and for your guidance. The demonstration homes are being built from the 24 most popular plans as illustrated in Volume I of "The Books of a Thousand Homes" as published by the Home Owners' Service Institute.

"A Manual of Home Building" actually tells the story of the building of any one of the typical better built American homes as constructed during this campaign. While reading, you will be taken through the various stages of construction and equipping, decoration and furnishing, step by step—just as you would build your own home, or as you should study a house already built to know its good points before you decide to buy.

When the planning of a home begins and the specifications are written then is when the decision for economy in materials is made and standards of goodness are fixed.

Will you build of wood, stone, brick, hollow building tile, stucco? The selection of basic structural material is usually made on the basis of personal preference—and local market conditions. Bungalow or house? That doesn't matter much. Colonial, Spanish Mission, English? Architectural treatment is much a matter of individual taste. These are decisions that only you may make.

Strength in Foundations

But to build the home well is vital. You must begin with the foundations.

Its strength and stability very much rest upon the firmness and sturdiness of foundation walls. The use of gray Portland cement for your basement walls, footings, steps, basement and porch floors will give you the advantage of rigid, permanent and maintenance-free foundations.

Likewise the rigidity and the long life of your entire home depend largely upon the quality of workmanship and standard of materials going into the construction of the basement walls. Settling, cracked plaster, windows and doors that do not work properly, floor cracks, are among the bad features traceable to poor foundations, causing endless repair bills and depreciating resale and loan values.

Either concrete block or poured concrete walls, with the use of Portland Cement made by the Lehigh Portland Cement Company, are specified for basement work and all other concrete work in the houses for the National Demonstration "Model" Homes Campaign.

While excavation and basement are the first actual steps in home building, the completion of the basement walls above grade must be done, taking into consideration the materials to be used in building the exterior walls of the house. Basicly there are three types of exterior wall construction, materials and methods used (as specified for the National Demonstration "Model" Homes Campaign) being more completely described further along in this manual. These types are:

(1) *The Solid Masonry House* with walls of brick or hollow building tile, the tile walls often being faced with brick veneering, or surfaced with stucco, occasionally using also brick, stone or timber trim details; using insulating lumber on inside walls.

(2) *The Brick Veneer or Stucco House on Frame,* having a frame wall structure with insulating lumber sheathing, surfaced with either (a) brick, or (b) stucco—the (a) brick veneering being laid up against the sheathing for surfacing, the brick being tied in solidly to the framing with metal clips fixed in the mortor joints; and the (b) stucco exterior surfacing, the coats being trowled over metal lath backing which has first been nailed to the furring strips affixed to the sheathing.

(3) *The Frame House,* having a frame wall structure with insulating lumber sheathing, to which is applied the exterior wood siding, or the shingle exterior surfacing, or combinations of both, as specified.

Finishing the Basement Walls

So it will be clearly apparent that the materials decided upon for the exterior walls have a real bearing on the method of finishing off the top of the basement walls, because whatever construction material is decided upon for the exterior side walls, that material, or materials, must be properly built onto the basement walls and firmly fixed thereto.

Thickness of the foundation walls is usually regulated by state or local building codes. Eight inches is the minimum thickness of exterior or load-bearing walls recommended by the Building Code Committee of the U. S. Department of Commerce.

A dry basement is a positive essential of good construction. For well drained soils the only precaution needed is building concrete block walls below grade to see that the joints are well filled with Lehigh cement mortar and carefully pointed. If the subsoil does not have a good drainage a line of drain tile should be placed around the outside footing below the cellar floor level and connected to a suitable outlet to carry off subsoil water. This also holds good when basement walls are of poured concrete.

Many homes are being built today with walls of Lehigh concrete block, tile or brick. The aged-old qualities of Portland cement make such a house economical in upkeep, fire-safe, permanent. Walks, drives and curbs made with gray Lehigh cement will give long life and durability.

Good common brickwork is also recommended for basement walls.

Well Lighted Basements

While looking to your well-built basement walls, steel basement windows should be considered. Freedom from sticking, warping, shrinking or swelling are only some of the advantages. Fenestra steel basement windows, made by the Detroit Steel Products Company, are to be placed in the basement walls shortly after the concrete has set.

Made from rolled steel, Fenestra basement windows, because of their narrower sections, admit about 50% more light than wood windows occupying the same size masonry openings. They "daylight" the basement and thus create much more advantageous laundry and other work space.

A convenient wedge locking device shuts the Fenestra basement window tightly against the weather and possible prowlers. At all times, regardless of weather conditions, Fenestra windows open easily and close tightly for they cannot warp or stick. A ring and chain attachment hooks onto an overhead joist to hold the window open without propping.

The combination of concrete and steel products of standard known value, should with good workmanship, sufficiently safeguard your home foundations.

One item, however, enters into every home that is built—and that item is lumber. Sooner or later, to every home builder, this fact comes home: There is a difference in lumber.

Standard woods are arranged according to their qualities into many classes—some for framing, some for boarding, and some for finishing. Do not try to use for the framing, which

in a frame house follows the foundation work, a class of lumber that is suitable only for common boards. No matter what basic materials you may use in the construction of your home, some framing lumber doubtless will be called for, and you will use lumber for other purposes—flooring and finishing.

Lumber buyers sometimes "shop around." Unfortunately for the home builder, the "best deal" too frequently means merely the lowest price and consequently lumber of questionable value. Therefore, for the sake of your home building investment, it is well to give just as much consideration to the value and quality of your lumber as to the price. In other words, do not risk the whole security of your lumber investment for the sake of saving a few dollars. "Bargain lumber" has only bargain building value. Look carefully into the quality and the lasting dependability of lumber whose only sales argument is, "It's the cheapest." Know the lumber you buy.

Know the Lumber You Buy

Today lumber has ceased to be "just lumber" and you can buy known dependable lumber by name and identify it by the trade-mark, just as you do your many household goods. Trade-marked lumber is available through retail lumber dealers at practically the same price as any good lumber.

Long-Bell trade-marked lumber has been specified in the demonstration "model" homes of the Home Owners' Service Institute for its nation-wide campaign. This lumber, manufactured by The Long-Bell Lumber Company, can be identified by the trade-mark on the piece. This branding with its trade-marked name and national advertising of trade-marked lumber are policies adopted eight years ago after the company had been engaged in the lumber business since 1875 and followed more than a quarter of a century manufacturing lumber that had a growing reputation for uniform quality. And to this company goes the distinction of being the first lumber manufacturer to trade-mark and nationally advertise its product.

Accuracy of manufacture is one of the very important points brought out in Long-Bell lumber production. A joist in your house that is wider at one end than at the other must be planed down by the carpenter by hand (and you pay the cost of all such labor which results from using poor materials), or you may have a construction defect, in consequence.

Flooring of imperfect manufacture does not fit snug; it does not give the dependable service you expect from your floors; and the very best workman cannot make its appearance all that is desired by the builder.

You want to be sure that with the lumber you buy there is involved a minimum of carpenter labor of planing, sawing and sorting. It should be uniformly seasoned and graded, and uniform in width and thickness in all surfaced stock and surfaced on four sides. Tongue and grooved stock should fit snugly. Then there will be a minimum of waste and a consequent saving in material and labor cost. These are among the reasons why trade-marked lumber always is economical in the long run.

Long-Bell trade-marked lumber and oak flooring, which have the advantage of accurate manufacture and thorough seasoning, besides being nationally known for these qualities, therefore has been selected. It will help you keep down re-manufacturing costs on the job and will assure full value for your lumber investment.

Stucco Surface or Brick Veneer

If your home is to be of frame construction, you may decide to create an exterior brick facing by veneering with common brick. Many stucco surfaced homes are likewise not of solid masonry construction, but of frame with stucco exterior.

If your home is to be all frame, the exterior siding or clapboards should be selected with utmost care as to quality and standard. Wood shingle exteriors are also popular.

In selecting your materials for sheathing (the boards heretofore usually used to cover the framework of your house before the exterior finish of wood or shingle siding, brick veneer or stucco is applied) you will be interested in knowing that an insulating lumber (not cut from trees) is now available which stops heat, cold and noise. This material is Celotex, made by The Celotex Company. It is manufactured in broad strong boards from the tough fibres of cane. Sheathing with Celotex ordinarily costs no more than wood, yet Celotex will make your home winter-warm, summer-cool, and quiet. It is also stronger in walls when used as sheathing than the ordinary wood lumber similarly used.

Another excellent example of this simplification of carpenter labor is found in the use of the newest development in bridging, known as Tru-Tye steel bridging, made by the Blaw-Knox Company. The installation of bridging, to reinforce wood flooring and floor framing, is really a part of the framing of the house.

Bridging is something most people know little about. Its value is apt to be questioned. But don't you make this mistake unless you want floors that develop flaws and squeaks within a few years. Bridging should be used under the first and second floors, and it has an important bearing on the strength of the house. Wood bridging has been used ever since frame houses were built. Steel bridging is a real improvement for it has no nails to loosen and pull out. Just as electric refrigeration is superior to the old ice box, so is steel better than wood for bridging and costs no more. Make no mistake about that.

The fact that Tru-Tye is a steel tension bridging is important because wood and other forms of bridging are used in compression and have but a fraction of the reinforcing value. This bridging is furnished to the builder complete and ready to install. No nails are used for fastening it to the joists, as it has prongs with points sharp enough to be driven into the wood with one blow from a hammer, saving time, labor and consequent cost.

Steel Bridging for Strength

This bridging can be used successfully for any of the many different conditions that may occur in house framing; for spacing between joists which is narrower or wider than standard; for double joist framing where the joists rest on the wall plate; a slight varying in the method of installation makes it suitable for every situation.

Tru-Tye is made from black, strip steel, corrugated along its length for strength and it is coated with acid-proof paint, so it resists corrosion. It makes a good appearance and provides all reinforcement necessary for a solid even floor that will never sag or dip. It is easily installed and economical, for the time necessary to completely bridge a floor is but a fraction of the time that would be required to bridge the same floor with wood. It is one of those seemingly little things that do so much to insure satisfaction with the finished house and to maintain the value of the structure.

For regular spacing, the prongs, referred to above, are driven into the tops of the joists themselves. When the flooring is laid, the lower ends of the bridging are secured to the bottom of the joists in a similar manner. Thus a secure anchorage is provided which nothing will loosen.

This may seem a little bit technical and if you do not fully understand just what is meant, have your architect or builder explain it to you. In the meantime see that your specification calls for this new steel tension bridging. Take the word of experts that it is the type you should have in your house. It is standard equipment in all the houses of the National Demonstration "Model" Homes Campaign.

Solid Walls of Brick

Brick, one of the oldest and best, yet not the most favored of building materials during recent years, is swinging into a new popularity as America awakens once more to the value of service, safety and permanence in home construction. Several factors are contributing to that end. The burden of fire loss, high insurance rates and excessive cost of fire protection, are emphasizing our realization of a great economic loss for which better and safer building construction are the real remedies.

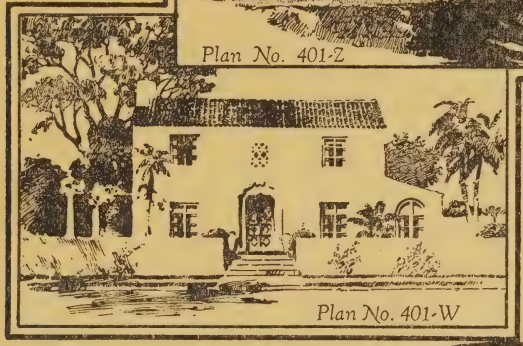
Some years ago the brick house—statistics of the Common Brick Manufacturers Association of the United States so indicate—was undeniably more costly than some other types of construction. Today, with a difference averaging from 5 per cent to 10 per cent, rarely more, on the total cost of construction, you may have a brick home with solid walls of masonry, that in the long run is most economical to maintain. And of the finest grade of brick.

Undoubtedly the architect is to no small degree responsible for this changing sentiment in home building. For the architect has demonstrated very convincingly what can be done with ordinary common brick, coupling good design with careful workmanship and the attractive use of bonds and joints in the brickwork.

Where antique effects are desired, fitting architecture or location, skintled brickwork can be made to meet the requirements of the most exacting architect and owner. If architecture or location demand that the house be white or of other color, the desired effect may be obtained by painting.

A Colonial design of New England type, an architectural competition prize-winner, a practical plan, to build of frame, with wide siding or wood shingle side walls. (Plan No. 401-Z, at right.)

Plan No. 401-Z

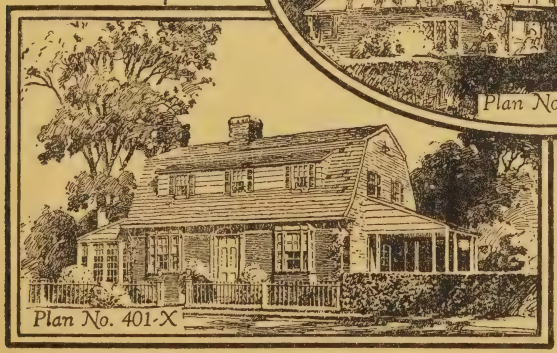


Plan No. 401-W

The vogue for Spanish architectural treatment continues throughout the country. This villa type of tinted stucco on hollow building tile might be seen anywhere in sunny Spain, though not so modern in its conveniences. (Plan No. 401-W, at left.)

Along the byways of old England this Elizabethan style of half-timber, stucco and brick house, with climbing vines and rambler roses, a close clipped hedge in front, would appeal. Set down anywhere in America, it would be equally charming. (Plan No. 401-Y, at right.)

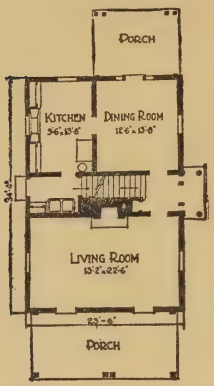
Plan No. 401-Y



Plan No. 401-X

This substantial Dutch Colonial design for construction of common brick has sufficient wood trim to give pleasing trim and color contrast. Its gambrel roof and dormers are distinctive. (Plan No. 401-X, at left.)

Second series of houses built in 1926 National Demonstration "Model" Homes Campaign. Nos. 401-W, 401-X, 401-Y, 401-Z. Floor plan, description on next page.



FIRST FLOOR

Floor plans also are available for this design as a 5-room house, with only 2 second floor bedrooms.

SECOND FLOOR

Better Homes Week "Model" House

First built as New York City's official suburban demonstration "model" home in connection with Better Homes Week in America in 1922, Plan No. 401-Z was designed by John Floyd Yewell, architect, of New York City. It was also the first "model" home to be constructed by the Home Owners' Service Institute, cooperating with the New York Herald Tribune, and has been built more than one hundred times since then throughout the United States and abroad.

Mr. Yewell, in consultation with Arthur Bates Lincoln, architect for the Institute, has designed three more exteriors for his original floor plan. These are illustrated on the preceding page. It should also be noted that this plan captured first group prize in the 1921 "Own Your Home" Expositions architectural competition.

Slight changes in details of design in the four types will be noted by studying the elevations shown on the preceding page and comparing them with the floor plans above. The Dutch and New England Colonial designs have open porches, but either could be glassed-in, or a garage built on at one end replacing a porch, or one porch not built at all, as with the Elizabethan English type. The Spanish house shows a garage at one end.

There are six primary rooms, excellently laid out. The so-called "box-like" house, being almost square, is always the least costly to build. The basement may be either fully or only partially excavated. Each design is a little gem.

Full directions for obtaining complete blue print working drawings and specifications, ready to build from, will be found on page 44.

Distinctly the most money saving development in brickwork is the hollow wall for residences. Besides saving both material and labor, this type of wall develops a load bearing strength almost equal to that of the solid wall; it exceeds the performance of the solid wall in resistance to heat and cold. It offers great resistance to loss of heat in winter or the penetration of heat in the summer.

Common brick is available in every part of the United States. It is always a locally made product; there are never high transportation charges to pay.

Masonry walls of burned clay units insure worth while savings in fuel costs, as well as a lower insurance rate. Brick walls do not deteriorate. Brick houses do not show their age. Note the next one you see; it will be difficult for you to say whether it has been built one or fifty years ago. This means that brick houses have high resale and loan values.

Other Uses for Common Brick

Gardens or property walls, built with common brick are, without a doubt, among the most attractive and protecting type of inclosure in use. In England where the use of brick abounds, some of the most beautiful property walls in the world, built of this material are to be found. Garden walks of common brick are beautiful, useful and long wearing. Their popularity in this country as well as abroad, is evidenced by the many gardens, both large and small, threaded with these colorful paths.

Common brick porch floors and steps are durable and easy to keep clean. They offe- the home builder a pleasing and substantial change from the more conventional conr struction.

Brick or stone were the only two materials used in the basement walls of residences until recent years. Good brickwork is an excellent material for this purpose. It can be made thoroughly waterproof. The interior surface presents a good appearance but can be cheaply coated with whitewash or other coverings if desired.

Another building material to be used in the wall construction of many of the Home Owners' Service Institute demonstration "model" homes and which can be recommended to the home builder, is Natco Hollow Building Tile. Walls built with this quality material are fire-safe, durable, dry and comfortable, free from dampness and when properly laid up, practically free from repairs.

Any style of exterior architecture is possible of construction with walls of hollow building tile. Usually the walls are surfaced with brick veneer or stucco. Natco Double Shell Load Bearing Building Tile and Natco Bakup Tile, made by the National Fire Proofing Company, have been specified and selected.

Hollow Building Tile Walls

Natco Hollow Tile is made of well-burned clay. Hollow air spaces make the units comparatively light in weight, easy to handle, and laid at a saving in labor cost. A single unit lays up 12 x 12-inches or one square foot for 6, 8, 10, or 12-inch walls, and each unit is stamped with the trade-mark name "Natco."

The exclusive design in the double shell construction eliminates through mortar joints. This construction feature, along with the hollow air spaces in the wall itself has great insulating value, aiding greatly in preventing penetration of heat, cold, or moisture. The face of the interior surface is scored, so that the plaster can be applied directly, if desired.

Walls of Natco hollow tile faced with brick are warm and dry, as the tile forms an insulation back of the brick. For brick facing Natco Bakup Tile has been selected. The tile unit is $3\frac{3}{4}$ x 12 x $10\frac{1}{2}$-inches, with the trademark name on each piece. All the varied and attractive combinations effected in common brick exteriors are at your disposal.

Stucco exterior finishes on Natco hollow tile create as true a type of permanent construction as can be found, and all of the many varieties of stucco textures and colors may be used. The dove tailed scoring, which is a feature of Natco tile, grips the stucco and plaster firmly and securely. There will be no shrinking, warping, cracking, checking, rusting, sagging, or scaling when the job is done in a workman-like manner.

During recent fire tests held by the government bureau of standards at Washington D. C., Natco Double Shell Load Bearing tile proved to have the highest fire resistive properties. These tests were impartial, though authoritative in every way.

With this type of construction you make certain that your exterior stucco and interior plaster will withstand the greatest extreme of temperature and moisture without deterioration. The use of Lehigh Portland cement for the exterior stucco work insures a high quality material.

There should always be three coats of stucco used for exterior finish with Lehigh cement on hollow building tile. This is equally true of Lehigh cement stucco applied directly to metal lath when the walls of the house are of frame construction. Three coats should always be specified. These same specifications should be followed if walls are laid up of concrete, brick, or other units.

A vast range of variety in color and surface textures with the use of Lehigh cement for stucco can now be obtained. It is this variety and beauty of architectural treatment as obtainable today for stucco exteriors that has so greatly popularized the stucco house in all parts of the country. Ease of handling, nation-wide manufacture and distribution, and moderate cost of Lehigh Portland cement make it desirable for all types of concrete construction and finish.

Efficiency of Steel Casements

For the sturdiest of construction, combining also in your new home the charm of old European architecture with American standards of superior design and accurate manufacture, steel casement windows throughout the house are recommended. They will impart an air of coziness and hospitality to any home, large or small.

Architecturally, the steel casement window is adaptable to almost any old world or new world modernized style. A study of the various architectural designs in this manual, with casement windows shown in all, should convince you on this point.

Steel basement windows were discussed in connection with the basement walls. Steel casement windows properly follow with the discussion of the walls of your home for there is where they build tightly in. Fenestra steel casements made by the Detroit Steel Products Company have been specified for the demonstration "model" homes.

The slender steel bars of which Fenestra casements are constructed permit daylight to enter through practically the entire window opening, instead of cutting it down with the heavy framing section used in the ordinary wood windows. Similarly, the slender steel muntins and small panes of glass give the window opening a texture which lends itself, beautifully, to the daintiest of colorful drapes within.

Fenestra casements are, by actual test, more weathertight than the average weatherstripped double-hung wood window, and they ventilate to any desired degree without drafts. Their swing-leaves may be held in position with the special operating device, so as to actually deflect directly into the room any breeze that may be moving.

Cleaning is accomplished easily and quickly from inside, without leaning over the sill, by simply reaching through space between swing-leaf and jamb, provided by the extension hinges. Screens are placed inside where they stay clean and do not soil the curtains. Fenestra casements open outward.

Inside trim, with these steel casement windows, is kept at minimum. This reduces cost. Likewise, as there are no window sash cords to be hung, nor weights or other builder's hardware to be purchased, with accompanying cost of carpentry installation, additional labor costs are saved.

Insulation, Plus Strength

We have often stressed the importance of building to shut out Summer heat and Winter cold—to increase comfort and save excessive heating costs. But insulation, until recently has been a considerable expense because insulating materials were extra items to be figured in the building cost. Now Celotex insulating lumber, because it both builds and insulates, and so is not an extra item, has made this great comfort and economy practical for houses of every size, new or old.

It was not until a few years ago that the amazing possibilities of bagasse (sugar cane fiber) were discovered. A long period of investigation followed; then Celotex was given to the world; made by The Celotex Company.

Unlike ordinary insulation, Celotex is not an extra item in building. It adds but little, if anything, to the cost. With Celotex in the walls and in the ceilings or roof of a house a

smaller heating plant and smaller radiators will keep the occupants perfectly comfortable, and year after year it will save from 25% to 35% of the fuel bill. At the same time it gives greater strength to walls, makes both building paper and extra insulating materials unnecessary and, because it comes in large boards, it saves labor expense in application.

In all types of frame construction Celotex insulating lumber nailed to the outside of the studding replaces wood sheathing, as previously explained. It supplies, at the same time, the insulation needed back of the wood exterior, the brick veneered exterior or the stucco exterior, as the case may be.

In the masonry house with its brick or tile walls, where sheathing is not used, the Celotex is nailed to furring strips, which in turn have been firmly secured to the inside of the masonry wall. Thus, fixed to the inside of the masonry wall, the Celotex is both insulator and plaster base.

On the inside walls and ceilings, the plaster is applied directly to the surface of Celotex. This eliminates the use of lath and gives stronger insulated walls, that are less apt to crack, and free from unsightly lath marks. Gypsum plaster bonds with Celotex much tighter than it keys to lath.

Save Heat—Bar Cold—Insulate

During the summer, most heat beats into houses through roofs; causing hot attics and bedrooms; while during the winter, most heat leaks out through roofs, causing high fuel bills. This insulating lumber applied over or under roof rafters gives the needed protection. For best results both uses are recommended.

Celotex in the garage will help keep the car from freezing in winter, by retaining the engine's heat, and will make a cool place in which to work during the summer. By lining the inside walls and ceiling with Celotex, the garage not only becomes well insulated but is also finished off in a most attractive manner. In houses already built a big measure of Celotex comfort and economy can be secured by lining attics and basements with it—that helps a lot and costs but little.

For the interior plastering of side walls and ceilings, prepared gypsum plaster is applied directly to the surface of Celotex insulating lumber in the same manner that it is applied to wood or metal lath. Gypsum plaster bonds perfectly with Celotex when properly applied.

After the first brown or scratch coat of gypsum plaster has dried, the second and final white or finish coat of Tiger Finish Hydrated Lime Plaster, made by the Kelly Island Lime and Transport Company is applied. Celotex being a solid base for plaster there is need for only a two-coat plaster job—one brown coat and one white.

Interior Finishing Plaster

Lime mortar for finish plaster coats has long been preferred for enduring plaster work. In Europe, Asia, Africa, Peru and Mexico there still are remains of work done long ago in lime mortar. The pyramids of Egypt contain plaster work four thousand years old which is in perfect condition today.

In addition to its unequalled plasticity, which makes lime the ideal material for perfect plaster finishing work, lime is hygienic; vermin avoid it. The house built with lime plaster in finishing is clean and sanitary. Lime plastering in this finish work contains millions of tiny air cells, which help absorb the sound. Because the plastered surfaces of the average home constitute over 80% of the visible interior, quality of the plaster work is of the highest importance, the beauty and character of the home being largely dependent on it. A good lime plaster finish and a good plastering contractor are necessities.

Today the production of lime is a vast industry lead by the Kelly Island Lime and Transport Company, the largest producer of lime and limestone products. In the White Rock district of Ohio, the lime rock has physical qualities, unequalled elsewhere, for making lime for homes. From this famous deposit Tiger Finish Hydrated Lime is made.

Due to the natural qualities of the rock from which it is made and the care used in manufacture, Tiger Finish has unusual plasticity. Because it spreads smoothly with little effort, it aids the plasterer in preparing smooth surfaces and perfect corners and angles. Plasterers have long called it the lime that "spreads like warm butter."

Plasterers prepare the pure white Tiger Finish coat in a clean box using clean water. When the lime "putty" has stood for 24 hours, a little plaster of Paris is added to aid in

hardening the plaster and it is ready for use. The plasterer uses a variety of tools to secure the smooth finished surfaces, or whatever effect is desired.

By mixing sand with the lime, a "sand finish" is secured. This is rougher than the usual finish and is very attractive when the surface is to be tinted or painted.

More and more homes are being done with lime plastering finished in various textures suitable for particular types of home architecture. Textures appropriate to French, Spanish, Italian, Old English, Spanish-American and other types are produced.

Just as a pleasing variety of textured, figured and brightly colored wall finishes are being used in a larger way on the interiors of our small homes, so are the roofs of our houses of today taking on more interest through a generous use of color and pattern. The day of the drab roof is gone; the roof that merely shuts out rain.

Color and Durability in Roofs

While the roof of your home must shut out the elements and must be durable, it should at the same time—because it is one of the most prominent architectural features of the house—add beauty through color and pattern. Your greatest opportunity to increase the effectiveness of your house-top and the entire architectural treatment lies in a wise choice of roofing color. The magic influence of color relieves monotony, adds individuality and creates the very atmosphere of a home.

Often the largest unbroken expanse of a house, the roof, sets its whole color keynote. Pleasing lines can be strengthened by tones contrasting with the body color or trim of the home, or its setting; severe lines may be softened by means of blending shades.

It is important, of course, that the roof color be in harmony with the rest of the house. Only then does the roof contribute its full share of beauty to the home.

Never before has there been such a selection of beautiful roofing colors at so moderate a price as is now available in Richardson Multicrome Roofs, made by The Richardson Company. In this slate-surfaced roof, Richardson has created a rich variety of color hitherto approximated only in the more expensive types of roofs. These colors are permanent. They are fixed by nature in tiny gems of slate. Weathering only enriches them.

108 Possible Combinations

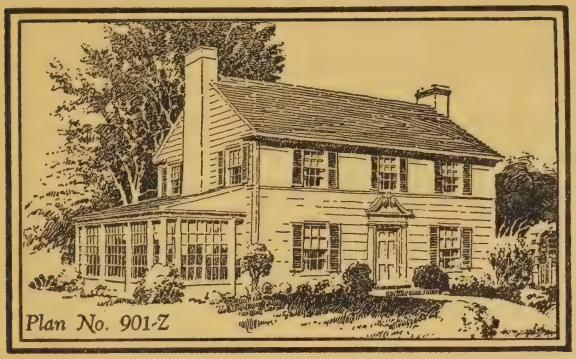
There is a Richardson Multicrome Roof for every type of home. Among the many new and exclusive combinations including Tile Red, Jade Green, Dusk Blue, Heather Purple, Antique Brown, Weathered Brown, Opal, Bronze Mosaic and Duotone Brown, there is one which will harmonize especially well with your home. There are now 108 possible color and pattern combinations. Thus to secure a roof in perfect color harmony it is now only a question of selecting the most suitable Richardson Multicrome Roof—108 possible combinations.

The Richardson Multicrome Roof is built of Super Giant Shingles, which, in addition to their surface of exclusive slate colors, are 50% thicker and contain 100% more waterproofing than the ordinary asphalt shingle. The base is of Richardson long fiber felt which has an established reputation for quality of materials and pure bitumen, especially vacuum processed.

The Super Giant Shingle is extra heavy and extra large, 10″ x 14″. Its extra weight adds to the appearance and texture of your roof, because deeper shadow lines result from added thickness. Its surface of close, over-lapping flakes of slate from Richardson's own quarries is further protection from dangerous fire hazards. Considering the quality of the inner materials and their long life, Richardson Multicrome Roofs are actually inexpensive and most economical.

Any consideration of the roof would be incomplete without a careful survey of the sheet metal work including leaders, gutters and flashings. The lack of care in selecting materials in home building, and more especially in the parts just named which are called upon to withstand the greatest amount of exposure and wear and tear, means the creation of the costliest of all obligations, the "third mortgage" of excessive repairs.

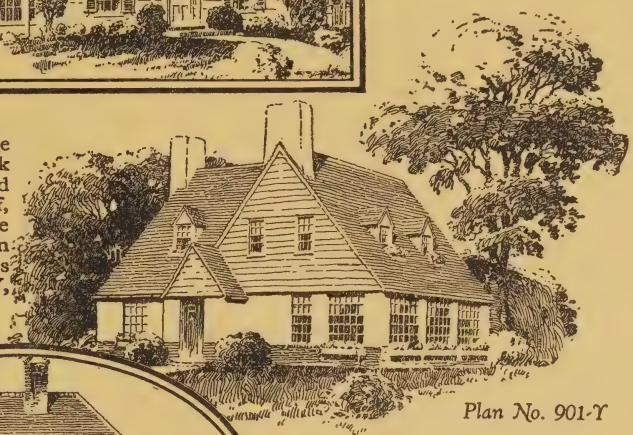
A good roof with copper leaders, gutters and flashings saves its slightly higher cost over materials that rust in a very few years because upkeep expense such as painting, repairing



Plan No. 901-Z

A splendid example of English Colonial, harking back to historic Revolutionary days, with the characteristic end chimneys and distinctive central entrance doorway details. Practical and fitting to any locality, for frame construction. (Plan No. 901-Z, at left.)

A modified English cottage design of common brick veneer, stucco and wood siding. High pitched roof, dormer windows, massive chimneys and glassed-in living porch add to its charm. (Plan No. 901-Y, at right.)

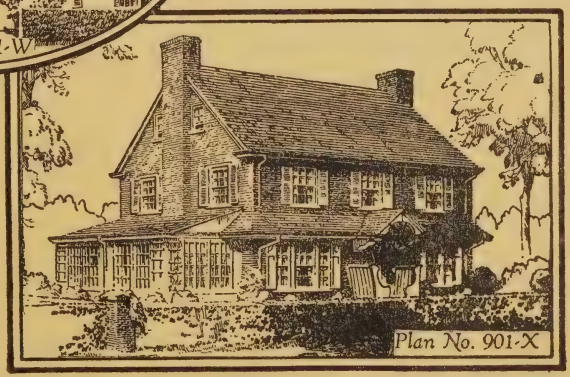


Plan No. 901-Y

Plan No. 901-W

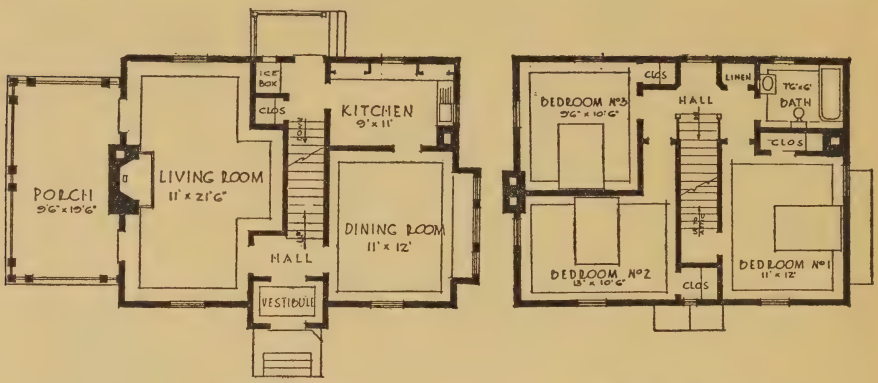
Showing the influence of French architectural treatment. Roof, chimney, half-dormers, breaking through the eaves, windows and arched-entrance doorway are unusual and striking—stucco on frame or hollow building tile. (Plan No 901-W, at left.)

Another Colonial design, originating in the Connecticut Colonies, modernized for present-day requirements. Overhang between first and second stories, hood above the entrance platform and flanking seats are features. Common brick is specified. (Plan No. 901-X, at right.)



Plan No. 901-X

Third series of houses built in 1926 National Demonstration "Model" Homes Campaign. Nos. 901-W, 901-X, 901-Y, 901-Z. Floor plan, description on next page.



FIRST FLOOR SECOND FLOOR

Featured Originally at Atlantic City

There is no better nor more convincing illustration of the fact that totally different architectural designs are applicable to one and the same floor plan than is shown on this and the preceding page. For every plan pictured in this manual, you know, there are four different exteriors—each being built somewhere in the United States in connection with the National Demonstration "Model" Homes Campaign.

Similarly different structural methods and quality materials can be used in the erection of side walls, for roofing, in interior construction and fixtures, with almost any plan. The accompanying four elevations show clearly the possible diversity and its practicability when properly standardized in design, as the Institute is doing with the aid of the architects supervising and the manufacturers and associations cooperating.

Plan No. 901-Z was originally designed by the Architect's Small House Service Bureau of the United States, Northwestern Division, and adopted by the General Electric Company for building at Atlantic City, N. J., to show its "G-E Wiring System for Life-Time Service," as specified for all of the Institute's demonstration homes. John Floyd Yewell and Arthur Bates Lincoln, architects, of New York City, have created the three other exteriors.

There have been slight changes made in entrance details. There is an added vestibule in connection with Plan No. 901-Y, and the perspective drawing shows the plan reversed. These are homes that may be built on either a corner or inside lot and oriented in almost any manner.

Full directions for obtaining complete blue print working drawings and specifications, ready to build from, will be found on page 44.

and replacing is unnecessary. With the higher labor costs prevailing today, it is wise economy to give labor permanent materials to work with, for then the labor cost is incurred but once. Roof flashings, gutters and leaders made of Anaconda Copper will last as long as the house stands because copper cannot rust.

There are a number of uses, in addition to roof flashings and gutters where rustless metals will save you money, for wherever corrodible metal is exposed to water or moisture rust is bound to occur. The principal items to guard against rust are the plumbing, hot and cold water piping, water heaters, hardware and screens. The cost of rust-proofing the home is surprisingly little. For example, Anaconda Brass Pipe for both hot and cold water lines of the average $15,000 house generally costs only about $75.00 more than pipe that rusts.

The importance of eliminating rust is evidenced by the fact that year after year homeowners spend more than $600,000,000 annually to repair and replace rusted metal work. The rust loss is actually six times greater than the fire loss.

From the standpoint of safety the consideration of fire stoppage features built into all homes is of the utmost importance, but from the aspect of actual money loss, rustproofing a building is obviously of as much importance as fireproofing. While no one would be without fire insurance, the need for rust insurance is frequently lost sight of—don't make this mistake. It costs less to carry one certain means of rust insurance, copper, brass and bronze than it does to carry fire insurance.

Copper Permanent—Value of Brass Pipe

Then there is the unsightliness of rusted metal which not only spoils the appearance of a building, but also decreases the chance of an advantageous sale and lowers the loan value.

When you use copper and brass you build for permanence, you save maintenance costs. The man who builds with Anaconda copper leaders, gutters, flashings and Anaconda brass pipe plumbing, not only has a more attractive place to live in, but also he can help maintain an automobile or keep himself in clothes with the actual savings in upkeep afforded by the repair-proof service of the everlasting metals.

Disposal of the rain water that falls on the roof leads us naturally to the piping and sanitary equipment of the house, which is the next subject we shall consider.

Here Anaconda brass pipe assures a full flow of water as clear and pure as it enters the pipe, for as long as the house stands. Anaconda brass pipe cannot rust or clog with rust deposits, which will reduce the flow to a rust-stained trickle.

All the hot and cold water piping in the model homes is Anaconda brass pipe as made by The American Brass Company. Every length is guaranteed and trade-marked for permanent identification.

When furniture wears out it can be replaced for the mere cost of buying new pieces. When plumbing pipe fails because of rust, the services of the carpenter, plasterer and decorator, as well as the plumber, are often necessary for much of the pipe in the average home is hidden behind wall and under floor. This involves the cost of labor as well as new material.

Install Good Plumbing

When plumbing fixtures wear out replacements must cover the cost of the equipment plus the cost of labor, taking out the old fixtures and putting in the new. Then we can sometimes get on very well without replacing a piece of furniture, but plumbing fixtures must be replaced at once.

Quality and service should be the prime factors in selecting the sanitary equipment for your home. It will pay you to give serious consideration to the question of good plumbing, fixtures and bathroom equipment. This is not only a question of convenience and comfort in daily home life, but also involves the avoidance of expensive repairs and alterations by the selection and installation of a good system when the house is built.

The selection of lavatory, closet and bath depend on the type of home, money to be spent and space to be occupied. Whether or not the housewife is to do her own work largely determines what additional plumbing may be necessary. Modern plumbing fixtures, as made by Crane Co., have been developed to promote sanitation and reduce cleaning labor.

Baths of the built-in type reduce the area of floor space to be cleaned and the area that may be tiled as well. The porcelain built-in bath, a clay product, is recommended because of cleanliness; for the more elaborate home the heavy weight type with sloping end, for the less pretentious home the enameled iron type which is popular because of its fine appearance and moderate cost.

The built-in bath is admirably adapted to the use of showers, a curtain can be used across the front. With a corner tub the curtain can be extended along the front and one end, leaving the two walls to complete the shower inclosure. The modern Crane Shower is equipped with a mixing valve of heavy construction, single lever handle, double compression type, with generous-sized supply ports; the mixing valves should be built-in the wall, with such construction that the valve and all working parts can be removed for re-washering. Because of its simplicity and reasonable cost the shower over the bath will always be popular.

Various Types of Plumbing Fixtures

Crane twice-fired vitreous china lavatories are easily kept clean; waste drains quickly through the unobstructed outlet; they are fitted with removable outlet plug. Enameled iron lavatories are used where cost is an important consideration and are most satisfactory. The smaller lavatories are usually fitted with two single, compression type faucets where pressure is high and with quick compression of Fuller type where water pressure is lower. The larger lavatories are usually fitted with a combination hot and cold supply fixture.

Low tank closet combinations are favored for the home, the noiseless, all white combination being the latest word in construction. Crane closets for the home are of three types, the syphon jet, reverse trapway syphon action and wash-down syphon action. The reverse trap closet has the general appearance of the syphon jet and is used where costs must be held down.

For the average home the kitchen sink answers for scullery, pantry, vegetable and baking sink. The most popular design is the double drainboard apron type, with sink, back, drainboards and aprons all cast in one piece and covered with white porcelain enamel. Usually they are fitted with combination hot and cold swinging spout faucet. Crane laundry tubs are also specified for the demonstration "model" homes nationally.

Built-in China Accessories

Much of the convenience and satisfaction derived from the modern bathroom is due to the accessories, the small fixtures recessed into the wall and cemented in place. These made by The Fairfacts Company are of white china, a sanitary, everlasting material. They are especially designed to hold the numerous articles used in the bathroom including soaps, towels, sponges, tooth brushes, tumblers and so on.

Designs and shapes are so improved that these accessories are readily cleaned with soap and water, there are no crevices nor corners to harbor dirt, there is no nickel to polish, no finish of any kind to wear off, chip or stain. Being of very thick, heavy china and securely cemented in place they never come loose or break.

Among the newer conveniences of this kind are:

Towel bars that are square; towels do not slip off.

Tumbler holders that shelter the tumbler so that it will not be hit or broken.

Soap holders that really hold the soap so that it does not fall to the floor. Self draining soap holders that cannot be filled with water by a neighborly shower bath.

Tooth brush holders so arranged that several brushes are accommodated and yet will not come into too friendly contact.

Wall grips that aid in getting out of the bath tub and prevent accidents from slipping. They are sturdy, easily grasped and close to the wall.

Toilet paper holders that partially conceal the paper and have a roller that keeps the roll of paper wound up neatly, something like a window shade roller, but better for the purpose.

A wonderful electric china radiator that is recessed into the wall like other Fairfacts Fixtures is available. It takes up no floor space and operates with a push button, heating

the bathroom pleasantly, quickly and economically. This is a fixture not to be overlooked. Think of the comfort it would give you on chilly days; through the long, cold winter nights when the heating plant is shut down; in time of sickness when a warm bathroom may be very necessary.

All these "Bilt-in" or recessed fixtures are really part of the construction of the building; they should be selected in time to appear in the specifications, and it would be helpful to have them shown on the plans. Avoidance of "extras" will be found a wise measure of economy.

These fixtures are sold and installed by tile contractors, and should appear in the tile specifications. Consult with your architect or builder regarding the sizes to suit the tile used and for location of the various pieces. Fairfacts fixtures can be installed satisfactorily in practically all kinds of walls or partitions.

If you do not plan to use tile on the sidewalls of your bathroom, Fairfacts fixtures will build-in perfectly satisfactorily with side walls of waterproof cement or into walls finished with wallboard made in a tile-like pattern.

These last named types of wall may then be finished in waterproof enamel of the preferred color.

Heating the Home

Without the luxury of hot water much of the joy of a modern bathroom would vanish. While the hot water plant is not considered a part of the heating equipment, certainly the two are related and they form a vital part of the house. With the heating equipment, as with other parts, maximum satisfaction and true economy are secured when the wisdom of the sage is followed—"the best is the cheapest." For your house insist that standard, nationally advertised equipment throughout be specified.

If your home is located where rapid changes of temperature are apt to occur in a few hours, you should have a heating system that will respond quickly to your demands. If the type of heating system best suited to your particular house is chosen wisely in the beginning, there will be no necessity for an expensive replacement a few years hence.

At the Institute of Thermal Research, at Buffalo, N. Y., the largest laboratory in the world devoted exclusively to the scientific study of heating, the American Radiator Company has perfected special types of heating outfits for special types and sizes of homes. Their selection is comprised of numerous models of boilers for large and medium sized homes, and small compact heating outfits for cottages, bungalows and smaller homes.

All Arco heating outfits are equipped with machine-ground doors which, when closed, prevent the escape of gas, dust and ashes. Because of the cleanliness this feature insures, their use is recommended in suburban homes wherein cellars are converted into laundries, playrooms, lounges, gymnasiums or workshops.

Gas for House Heating

Gas-fired steam boilers for use with vapor, steam, or hot water systems and warm air furnaces are now on the market which provide clean, dependable, effortless and economical heating. Some gas companies have special house-heating rates. A properly insulated house such as can be obtained with the use of Celotex insulating lumber, can be heated by gas doing away with dust, dirt, soot, coal space, smoke, ash carrying, furnace tending and other annoyances, practically at the cost of coal in uninsulated houses. In this connection you will certainly want to investigate your local gas rates for house heating and the Ideal-gas fired boilers.

The American Radiator Company offers a complete heating equipment service to home owners. To refer briefly to a few of their equipments there is the Ideal Type "A" for hard coal, the Yonda for either hard or soft coal, the Water Tube and the Arco Round for hard coal, and the Smokeless for soft coal, all but the last being perfectly adapted for oil-burning. Then there are two models of the well known Arcola Heaters specially designed for homes, with or without cellars, wherein radiator warmth is desired at low cost. Used with either Peerless or Corto radiators, an Arcola hot water system is the most modern and economical heating outfit obtainable at a low cost, both as to installation and maintenance. The Ideal Vecto Heater is a compact, self-contained warm air heater for small homes and other buildings that requires neither basement nor radiators and warms the entire home at the usual cost of heating one room.

Arco Tanks for Hot Water Supply assure a constant reserve of hot water, day and night, at any desired temperature. In winter they may be used in conjunction with the heating plant, and in summer they may be operated independently. Self-contained and of sturdy construction, they are made in both coal and gas burning models, and, except for water temperature regulations, their operation is automatic. Installed in either kitchen or cellar in any one of six sizes, the cost is very reasonable and every home owner can enjoy the comfort of plenty of hot water for a few cents a day.

In connection with the heating plant modern invention and science have done the home owner a favor in the development of the automatic heat regulator. It is very important to make provision for the installation of this, for authorities recognize that no heating plant can be operated to full efficiency without automatic regulation.

Automatic Heat Regulators

This equipment, made by the Minneapolis Heat Regulator Company, is not a luxury at all because it adds greatly to the comfort, convenience, healthfulness and safety of the home, at the same time saving between a fifth and a third of the fuel bill.

By arranging for it when plans are drawn you can have automatic heat control with a warm air, hot water, vapor or steam heating plant regardless of whether coal, coke, gas or oil is the fuel burned. The regulating equipment consists of three parts; the clock thermostat, which is installed in a handy central location on the first floor, the motor, installed in the basement, and the limit control installed on the boiler or furnace.

To maintain a given temperature, you simply set the indicator, which is located just below the thermometer. This done, the instrument automatically makes electrical contacts, which cause the motor to open and close the drafts, or stop and start the oil burner (if you use one in your home), as necessary, upon a temperature change of one degree.

The eight-day, seven-jewel clock automatically sets the thermostat to lower the temperature at night and to raise it in the morning before you arise. This assures you of a comfortable day-time temperature, and a lower, healthful temperature during the sleeping hours.

The safety limit control operates independently of the thermostat and makes certain that the furnace or boiler will never become overheated, or that you will never have excessive steam or water pressures. This safety limit control also insures economy as it prevents forcing the fire when, through a sudden drop in outside temperature, or other cause, the thermostat keeps calling for heat faster than the circulating system of the heating plant can transmit it to the rooms.

Forty years of experience have proved that the Minneapolis Heat Regulator saves, in a very short time, sufficient fuel to more than pay for itself. The cost of the equipment is only about one per cent of the cost of the average home, so you should, by all means, include the Minneapolis in your specifications and plans, so the wiring for it may be installed before the plastering is done. The limit control is put in when the heating plant is put in, and the thermostat is placed when you are ready to move in.

Electric Wiring Service System

The standards upon which adequate electric wiring for the home are now being generally measured by architects and builders of homes are those set up by the General Electric Company—the G-E Wiring System, for lifetime service. In the field of electricity, one company had pointed the way to the easy solution of your problem of selecting adequate wiring providing for all electric lights, for their proper control and for the housekeeping appliances that you or a future occupant of your home may some day want to use.

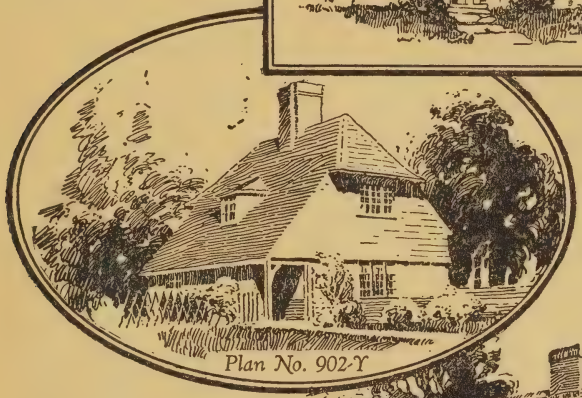
You will measure the comfort of your home by its convenience. In these days convenience is, in a large part, a matter of electrical service. Its effectiveness depends upon the completeness of the wiring.

Planning to build a new home, you plan your plumbing system as a unit, making sure that it will be complete. At the same time and for the same reason, you will appreciate the economy of building a complete electric system into the structure as it is erected.

The complete wiring installation is a direct and inexpensive avenue to the important objects of domestic economy. The completely wired home opens its doors to the whole range of home labor-saving and money-saving machinery. Here the vacuum cleaner

This is a striking cottage design in Norman French style, unusual in its sweeping slopes of roof lines and pleasing combination of timber, stucco and decorative stone work. Arched doorway, casement windows, chimney pots and connecting boundary walls are out of the ordinary—our cover design house. (Plan No. 902-W, at right.)

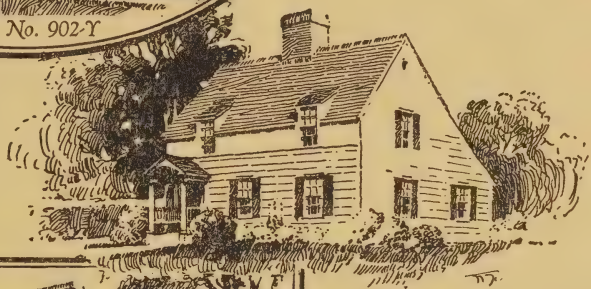
Plan No. 902-W



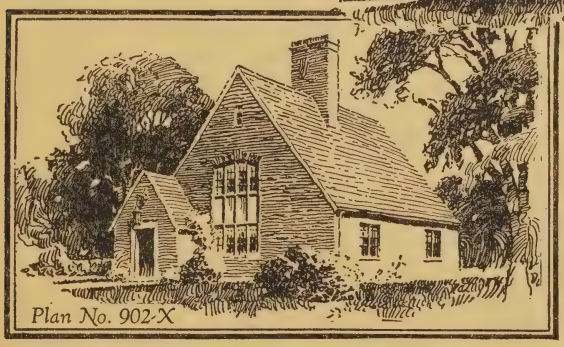
Plan No. 902-Y

A substantial and exceptional Brittany cottage type, with attractive overhanging roof lines and dormer windows breaking the expanse. Brick veneer, stucco and wood or shingle siding are specified in combination. (Plan No. 902-Y, at left.)

Early American Cape Cod style is portrayed in this house. Use of wide and narrow wood siding. Colonial half-dormers, and carefully detailed entrance porch are unusual. (Plan No. 902-Z, at right.)



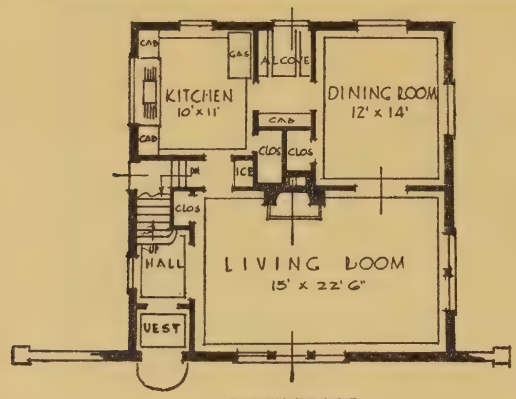
Plan No. 902-Z



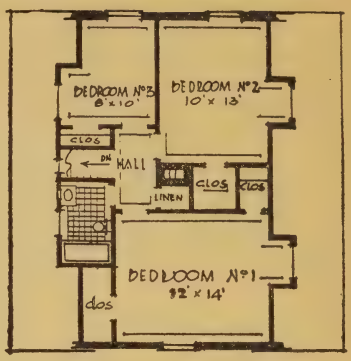
Plan No. 902-X

An English rural design for building of common brick. The high-pitched roof, overtopping chimney, unique enclosed entrance vestibule and unusual treatment of windows at the front, are an exceptional architectural combination not often seen. (Plan No. 902-X, at left.)

Fourth series of houses built in 1926 National Demonstration "Model" Homes Campaign. Nos. 902-W, 902-X, 902-Y, 902-Z. Floor plan, description on next page.



FIRST FLOOR



SECOND FLOOR

Demand Created Cover Design Home

Our cover design house! The original design for Plan No. 902-W will be found on the cover and title page of this manual and also on the cover of Volume I, "The Books of A Thousand Homes," the house plan book, published by the Home Owners' Service Institute.

Popular demand for this romantic Norman French studio-like story-and-a-half house has resulted in including its plan in the National Demonstration "Model" Homes Series. John Floyd Yewell and Arthur Bates Lincoln, of New York, are the architects responsible for the three new exterior treatments pictured on the preceding page.

There is a slight change in Plan No. 902-W from the illustration, as a study of the floor plan will indicate—dormer windows break through the sides of the roof to better light and ventilate the bedrooms on the second floor. It hardly seems possible that this one floor plan, without alteration, can be fitted to these four different exteriors, but it goes with them all—perfectly. This is a six-room home.

Window locations only change in the American Colonial of frame. Again it is only a matter of window changes and the adding of the vestibule in the building of the English type of brick. The Brittany cottage has a recessed open porch entrance instead of a vestibule and quite different roof lines and windows. The Institute is endeavoring with these practical illustrations and examples to show the layman how scientifically and at what high peak of perfection the modern architect and Realtor Builder are working for the best interest of home seekers of today.

Full directions for obtaining complete blue print working drawings and specifications, ready to build from, will be found on page 44.

takes over the hard labor of sweeping and furniture cleaning—without dust, without wear, and, above all, hygienically. Here the electric clothes washing machine and electric sewing machine lift the work and the weariness from the housewife's shoulders. Here a tiny motor performs all the hard tasks of the kitchen. The electric refrigerator has come to stay.

Then again many a man takes keen pleasure in little home tasks of repair and construction. Complete wiring, especially in attic, cellar and garage allows him to use an electric soldering iron or electric glue pot by merely plugging into the nearest outlet or socket. The same motor which can be made so great a help in the kitchen serves him in the quick, accurate use of tools.

Complete wiring with the G-E Wiring System is the road to a hundred comforts. Electric heating devices—percolators, urns, toasters, grills, are available in any room, at any time. Electric fans supply cooling, fresh air breezes; electric heaters make cozy the cold corners; while electric curling irons, heating pads, and flatirons can be moved about and used at any convenient point.

For Practical Use of Appliances

The hostess whose home is made distinctive by the refinement of soft lights rightly placed (and you can change the arrangement of lamps as often as you desire, having ample outlets), controlled by the touch of a switch—who can offer her guests dainty dishes prepared in beautiful electric heating devices—is one whom acquaintances love to visit, enviously at times.

When you have selected the plans for your new home, take them to a qualified electrical contractor. Ask him to complete for you the G-E Wiring System, for lifetime service. All the enjoyment of the complete and properly appointed electric serviced home will then be made available to you.

At first it may seem a far cry from heat regulation, as previously described, to garbage disposal, two of the real problems of home ownership, but as a matter of fact the latter is almost as closely related to the heating plant as is the former, and in the modern home garbage gives no more concern than does the gas-fired boiler. Garbage disposal, by incineration, should be planned for at the time the heating plant and flues are being specified and detailed.

Time was when the disposing of the trash and refuse that so quickly accumulates was one of the most distasteful and disagreeable duties that fell to the lot of the housewife. This work added its full quota to the many of her cares. Trips to the garbage can are never pleasant; during bad weather or at night they are even worse. The garbage can and the trash pile in the basement befriend germs and threaten health. The row of cans before the house or even in the backyard, waiting to be emptied by the garbage man, are unsightly to say the least.

Home Incinerators Built In

The Kernerator Chimney-fed Incinerator, made by the Kerner Incinerator Company, eliminates all this. It provides a most convenient and sanitary method of disposing of not only garbage but all household waste—yesterday's newspapers and old magazines, sweepings or dust from the vacuum cleaner, wilted flowers, tin cans, bottles, all waste paper and rubbish—in fact everything that is no longer wanted.

All this waste is dropped into a receiving hopper door located in the flue convenient to the kitchen, and falls down the flue to the incinerator in the basement, which is lighted at intervals (a match does it) and the whole mass burns without further attention. After repeated burnings, the flame sterilized tin cans, bottles and other non-combustible materials are dumped into the ash pit and taken out with the ashes.

The grates in the incinerating chamber are so arranged as to insure a minimum amount of gases or smoke during the burnings. At the side of the horizontal grates on which all refuse falls is a vertical grate called the by-pass grate. Behind the by-pass grate is a secondary or by-pass flue. During burnings the air comes up the by-pass flue, passes through the vertical grate and feeds heated oxygen to the top of the fire.

The fire is always at the top of the burning material. Heat liberates gases from the material underneath. These gases pass up through the flames where there is a plentiful supply of oxygen (from the by-pass) and are consumed.

This is the Kernerator in action. It destroys all garbage and waste both within and without the house at no extra fuel cost, no replacement costs.

Kernerator assures a clean yard, a neat back porch and basement. It saves the housewife thousands of steps. It abolishes the garbage can and the rubbish pile which are constant fire hazards and menaces to health. It is standard equipment for the modern home.

You will, of course, take pride in making your home a model one in every way possible. To build a house with right up to the minute gas service throughout—a "Blue Star Home"—assures you many convenience features which are almost indispensible.

For the purpose of increasing the comfort and satisfaction which home owners receive from gas service, wherever available, a standard installation of gas piping and appliances has been developed by the American Gas Association, the national organization of the manufactured gas industry. Member gas companies throughout the United States are permitted to adapt these standards to local requirements, and to award to every house so equipped a certificate and to designate it a "Blue Star Home."

"Blue Star Homes"

This symbol of adequate gas equipment is being adopted widely in many cities. The Blue Star poster on a new house is becoming the sign of greater owning value in the minds of builders and owners.

Your building contractor and architect take care of the size of gas piping and its installation in accordance with local ordinances and requirements. But all too often the home builder fails to include sufficient gas outlets which may be put in at little expense during construction, although more costly later on. By adopting for your home the local Blue Star Standards of adequate gas service and equipment you will simplify your problems, saving time and money in the end.

A pipe line is practically always run to the kitchen range, but the home builder should insure that a line is provided for the water heater, another for the laundry, and others to the fireplaces, whether or not the appliances are to be installed immediately or not. When a complete piping job is undertaken, there will be lines to the upper floors, and provision should be made for carrying a line to the furnace for a gas-fired boiler installation. A gas line to the garage is worth while.

The average moderate-sized house should have three chimney flues, at least—for furnace, for fireplace, and for other gas-burning appliances. Two flues are absolutely necessary.

Regardless of the number of gas-burning appliances to be used all should be chosen from two standpoints—adequacy and satisfactory performance—and not primarily on a basis of first cost. In these appliances particularly the cheapest may be the most costly if they are not adequate to the family needs and are not sufficient and economical. Good gas appliances are also remarkably efficient and safe.

Many Gas Appliances

The varied convenience and many uses of gas in the home include the following: Cooking—The familiar gas range offers usually the cheapest and most reliable, cleanest and most satisfactory appliance available. Water heating—An adequate supply of water from a separate gas-fired heater is essential today. Room heating—Supplementing the central heating plant, there are a number of gas-fired room heaters, ranging from the gas-steam radiator and the radiant fireplace type, to the portable and wall type heaters. Laundry—Here gas is always needed for melting starch, heating the ironing machine and for heating the water at times for electric or power washers. Other uses include garbage and waste incineration, garage heating, and even refrigeration, for there are refrigerators operated by gas which are quiet, reliable and economical.

To aid the public in identifying good gas appliances, the American Gas Association has established a Testing Laboratory for the purpose of testing gas appliances of all types and identifying with a Blue Star Laboratory Seal all appliances that meet the requirements of this laboratory. All appliances are tested for safety, performance, and durability and the requirements that must be met in order to receive approval have been set up by experts in the industry and representatives of the U. S. Bureau of Standards, U. S. Public Health Service and the U. S. Bureau of Mines. Gas ranges, water heaters, space heaters and all other types of appliances are being tested.

The laboratory seal is not a manufacturers' trade-mark but is a symbol of quality issued by a national authoritative body to designate such appliances of all makes that

meet the requirements as to safety, performance and durability. Home builders and buyers should be sure that the gas appliances they buy carry the seal of approval of this laboratory.

The gas companies locally are anxious and ready to co-operate in advising in the selection of suitable appliances. It is because they know that their customers will get satisfaction only if the correct appliances are used that the gas company sells or recommends certain appliances. Their recommendations are based upon careful laboratory tests, experience with the homes of the community, and upon knowledge of the gas pressures, heating values and other local gas conditions—so consult your local gas company and make your house a "Blue Star Home."

Proper lighting in the home is our next important subject.

In the home owner's lexicon, perhaps no two words spell more genuine comfort and satisfaction than do "Lighting Fitments." Enjoyment of the home for some members of the family at least must be largely after the sun has set. The degree to which this enjoyment is had virtually depends on the lighting. Unless the lighting is of the best, woodwork decorations and furnishings cannot possibly appear to full advantage. A good lighting system and all that depends on it, begins with the wiring, which we have discussed, and ends with the lighting fixtures or fitments, which we shall now consider.

Decorative Lighting Fitments

First, it is necessary to provide sufficient illumination to prevent eyestrain and to provide service. Second, the lighting equipment must be selected with an eye to the decorative effect.

The number and location of outlets has been carefully planned. These are the groundwork upon which the lighting effects are built up. The possibilities of decorating with light are unlimited, in fact decoration of this type is one of the really radical improvements in the homes of today over those of yesterday.

The principal source of illumination in the living room should be the 5-light or 6-light fitment hanging from the ceiling, or preferably close-up ceiling types when the ceiling is relatively low. In the dining-room a 5-light or 6-light fitment, suspended over the table, would make an excellent choice.

Wall brackets may be used to advantage in both the living-room and the dining-room, as taste suggests, 2-light brackets being especially recommended. Wall brackets are extremely decorative but should not be relied upon as the primary source of illumination.

Correct Kitchen Lighting

Kitchen lighting, as it is correct or incorrect, will do much to help or hinder the progress of the work done there. There is no excuse for having this room improperly lighted. A simple guide to good kitchen lighting is, first, be sure that there is a ceiling light hung sufficiently high so as not to interfere with free movement; second, provide at least two wall brackets, one over or near the gas range, the other near the sink, if there is no pantry.

In the entrance hall a 1-light or 2-light hanging fitment is in good taste, while in the sun-room, or enclosed porch, a 3-light or 4-light close-up ceiling fitment is generally used. Attractive outdoor fitments are available for the porch, in wall pocket and ceiling types. For the bedrooms a practical plan is to use wall brackets on each side of the dressing table, with a small, close-up ceiling fitment for general illumination. In the bathroom this same general idea should be carried out, placing the two wall brackets on either side of the built-in medicine chest.

Riddle Decorative Lighting Fitments, made by the Edward N. Riddle Company, have now become widely accepted as standard. They are available in a wide variety of designs and colors. The excellence of their manufacture and the character of their designs have made them exclusive choice of many of the leading architects and decorators. The character of all the Riddle designs is authentic. Some pieces, in which heavy bar iron is used, are particularly adapted to interiors of Spanish, Italian or English feeling.

Riddle fitments and Macbeth-Evans glass shades are especially designed for use with the new inside frosted Mazda lamps. Shaded light is always advisable in the home and this combination permits adequate illumination at all times, with the light properly softened and diffused. Both gloom and glare are avoided. It represents the most desirable combination of the practical and the beautiful that has yet been offered in decorative home lighting.

Another advantage of using Riddle fitments is the fact that wide-spread distribution makes them available in practically every community, at reliable electrical dealers.

And now to doors—doors represent the largest area of wood in the ordinary home. The mere fact that they move focuses attention upon them. They offer inescapable area to the eye. We come into more actual physical contact with the doors in our houses than with any other portion, with the exception of the floor we walk upon.

These are interesting facts about doors few of us consider. We are more often reminded of doors that do not hang properly, doors that refuse to latch and lock with the hardware out of plumb, and doors that have warped out of shape.

Select the doors for your home most carefully.

Correct, Well Made Doors

The Miracle Door is more widely sold than any other stock door manufactured. It is the climax of the efforts of three generations of door makers; an organization that is the oldest and largest manufacturer of doors in the United States—the Paine Lumber Company. These doors will be hung in all of the houses erected in the National Demonstration "Model" Homes Campaign.

The design of the Miracle Door is the first stock door placed on the market which has the feature of a recessed panel, together with a stock molding in a stock thickness of door. Thus it combines the simplicity of the single panel with the richness of the moulded door. It has a character that lends itself to the many styles of architecture due to its most artistic lines and proportions.

This door is strongly made and structurally correct. Miracle doors are made in either hard or soft woods. Patented standards of precision in wood manufacture, combined with quantity production to meet constantly growing great demand, have made possible this door at moderate cost price to the builder.

Beautiful and structurally good doors add much more to the selling or retail value of any place of residence. They may be in a large measure a deciding factor determining whether a home offers charm or intangible disappointment. Good doors should be the gateway to the heart of your home.

But equally important—and dear to the heart, and contributory to the health, happiness and contentment of the housewife, particularly—is another item on your bill of lumber materials for your new home, coming under the heading of "trim" in most specifications. This is the built-in kitchen equipment.

Built-in Kitchen Units

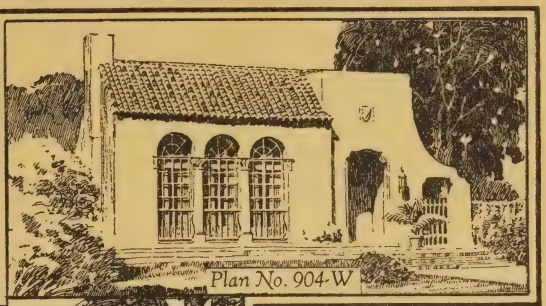
Kitchen planning, to conserve space, save labor and steps, organize kitchen work, and make the kitchen generally more efficient, clean and beautiful, is something of an art by itself. The best home economics experts in the country, with the co-operation of leading architects have been employed by one of the oldest manufacturers of kitchen cabinets, the Wasmuth-Endicott Company, to plan for the design and construction of its Kitchen Maid Standard Units; adopted as standard in Home Owners' Service Institute plan service for the national demonstration "model" homes.

The "unit idea" organizes the kitchen into a complete system of compact storage and working units—each complete in itself, yet built so that it can be used together with one or more other units, exactly according to the kitchen plans of the user. These Kitchen Maid units include kitchen cabinets, dish closets, linen cupboards, broom closets, in-a-wall ironing boards, refrigerators, divider cupboards, Pulmanooks, dinettes, and in-a-wall telephone seats.

They are standardized in construction, and made for economy as well as quality. They cost no more than old-fashioned cupboards. Being stock material, there is practically no carpentry labor involved on the job. The units come ready to set right up. Making your own special cabinets, cupboards, shelving, and the like with carpentry labor is usually much more costly and less satisfactory in the long run.

Kitchen Maid units represent the highest development of cabinet craftmanship for the purpose. They are built from carefully kiln-dried woods and never shipped unless protected from humidity changes by at least one coat of white flat undercoat paint.

Spanish Mission type bungalows are truly American, as much as the English or Dutch Colonial, dating back to the Castilian conquests in California and Florida. You will find this style of architecture springing up throughout the country—for colorful exterior stucco treatment on hollow building tile. (Plan No. 904-W, at right.)



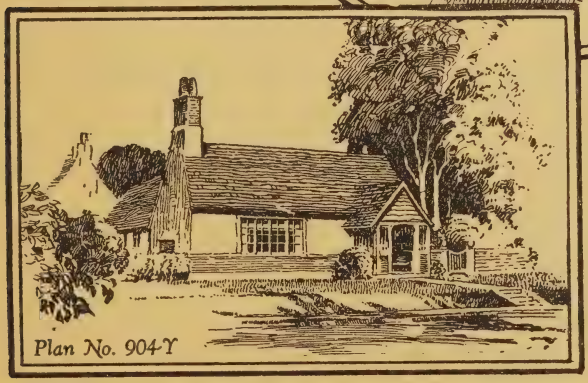
Plan No. 904-W

Plan No. 904-X

Norman French is rarely seen in America. For city or suburb this one-story home is quite different. The proper use of common brick in its wall construction would produce a beautiful exterior effect. (Plan No. 904-X, at left).

Cape Cod designs are popular, and strike another note in American architecture of Colonial period. This frame bungalow, which could be built either of wide wood siding or with side walls entirely of shingles, is an excellent example. (Plan No. 904-Z, at right.)

Plan No. 904-Z

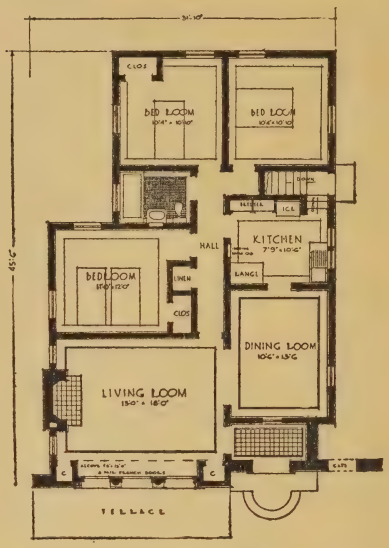


Plan No. 904-Y

A Devonshire English farmhouse inspired this little bungalow design. Its potted chimney and abruptly sloping roof are characteristic of this English type, for construction with the use of brick, frame and stucco on wood framing. (Plan No. 904-Y, at left.)

Fifth series of houses built in 1926 National Demonstration "Model" Homes Campaign. Nos. 904-W, 904-X, 904-Y, 904-Z. Floor plan, description on next page.

A Series of Four Bungalows



FLOOR PLAN

Bungalows are popular with many in this day of high cost of servants and tendency to compact living quarters, having the rooms all on the one floor. Plan No. 904-W was designed with this same sunny Spanish Mission facade as pictured on the preceding page by the Architects' Small House Service Bureau of the United States, Northwestern Division, collaborating with Charles Martin Hugget, architect, of Chicago, Ill., and Minneapolis, Minn., but has been enlarged inside, with slightly different room arrangement.

Those of you who have visited Chicago recently doubtless saw this bungalow, built full size adjoining the offices of The Celotex Company, on North Michigan Boulevard—a permanent demonstration home, beautifully illuminated at night—just north of the new Chicago Tribune Tower and the famous Wrigley Building. It has been built many times since originally designed three years ago.

Its enlargement to a six-room bungalow for the National Demonstration "Model" Homes Campaign, together with the three additional exteriors, are the work of John Floyd Yewell and Arthur Bates Lincoln, architects, of New York City. It is doubtful if four more charming bungalows could be designed. The plan also is available with only four rooms and a breakfast nook, allowing two bedrooms instead of three.

There are slight alterations in the four floor plans with respect to the front windows and the front entrance details, as the perspective drawings indicate when compared with the floor plan above. The Institute's architects believe that this bungalow series will be one of the most popular in the campaign.

Full directions for obtaining complete blue print working drawings and specifications, ready to build from, will be found on page 44.

The smooth door construction eliminates common panel doors on these units, which will not warp or get out of line. All interior corners are rounded, leaving no space for dirt to collect. They are finished in choice of white enamel, or one coat of flat undercoat. They are equipped with hinges, latches, and other hardware that are substantial and practical.

One naturally thinks of hardware in connection with doors, windows, kitchen equipment and furniture. Hardware together with the lighting fitments, is really the first step we take along that most interesting path of interior decoration. As this stage in our building is reached the operation takes on a new interest, and we must be well informed before we write that portion of our specification which deals with hardware or approve that section of the specification as it may be written for us.

Hardware, if it does not function properly, will take much joy out of life, and hardware, as it is constantly in evidence and conspicuous because it reflects light, must conform with the architectural spirit of the house and the feeling of the decorations. Hardware deserves your best thought. You will rue the day if you think you have saved a few cents by trying to make cheap hardware do.

Making Your Hardware Selection

Hardware is the machinery which opens and closes every door, window and drawer; like all machinery, it must work smoothly at all times; in considerable measure your security depends upon it. For each type of house in general favor there are appropriate hardware designs, correct in all details. If the hardware used is not appropriate, your house will wear a badge of poor taste.

Corbin hardware, made by P. & F. Corbin, covers all of these essentials. It is complete in assortment, so that any home can be equipped with Corbin throughout in a uniform quality and finish. Each article is included in wide variety giving an ample scope for choice.

Brass and bronze hardware should unfailingly be used in all places where there is exposure to weather, or where steam and moisture are likely to affect the finish, as in the bathroom and the kitchen. It really should be used throughout all homes.

The most important single item is the hardware for the front door. The hardware here can make or mar the general impression which the home makes on the person who approaches it. There should be a knob and escutcheon or a door handle to suit the style of the entrance and a lock which provides security.

Architecture and Hardware

A knocker is proper on a Colonial door. A letter drop conforms to the government requirements in free mail delivery zones, and a push button to harmonize with the handle is requisite.

There are especial Corbin designs in locksets for bathroom doors, with a thumb-piece on the inside to take the place of a key. For other inside doors there are other locks, easy-acting, sturdy and well made. The knobs and escutcheons are made in any appropriate finish, in brass and bronze, and in designs ranging from the very ornate ornamentation of the decorative periods to the more unobtrusive types which charm their simplicity. In any case, it is always well to consult with the architect before making the final selection; or, if there is no architect employed, at least with an authority on architectural treatment.

Window hardware should also be given careful thought, as it is always small items like these which are the first to be noticed when they are not in harmony with the rest of the general decorative scheme or do not function properly. Besides being right in their designs, window hardware should be easy to adjust and operate when in place, for there is nothing so annoying as to have windows which refuse to lock.

We are prone to judge and we are judged largely and at times perhaps unfairly by the appearance of our home. But appearance is important on another score—we are affected by and react to the subtle influence of our surroundings. We see only the surfaces of our home, and their appearance and influence is determined by hardware, paint, varnish and similar items.

Start right and insist on good finishing materials. An inferior finish soon disintegrates, water may turn it white and constant water will destroy it, leaving the surface unprotected and unsightly. You are then faced not alone with the expense of new finishing material,

but with the far greater expense of the labor required first to remove the remains of the old finish and second to apply the new.

Saving a few cents by purchasing inferior materials adds many dollars to upkeep later—the old story of being "penny wise and pound foolish." The greatest cost of finishing is the labor so it is the part of wisdom to employ that labor in the application of the best materials instead of cheap materials that may have to be replaced very soon.

The decorating or painting of a home divides naturally into two parts. First, the exterior where the paint serves not only as a beautifier, but also as a protector which, by saving the surface, prevents repairs and maintains values. Second, the interior where paint serves as beautifier, labor-saver and sanitary agent.

For exterior painting, a gloss paint is invariably used and the right prescription for it is an old one, simply Dutch Boy pure white lead as made by National Lead Company, linseed oil, turpentine and drier. This combination produces a white paint which may be tinted to any desired color through the use of colors-in-oil.

Painting, Inside and Out

Three coats of paint should always be used on exterior surfaces, a thin priming coat and two heavier finishing coats. The priming coat anchors the paint film to the wood and care should be taken to brush this coat well into the wood. No exterior painting should be done while the surfaces are wet or dirty, nor when the temperature is lower than fifty degrees.

From two to four days should be allowed each coat in which to dry thoroughly. All knots and sappy streaks should be shellaced before paint is applied. Nail holes, cracks and other defects should be puttied after the priming coat is dry, the putty being made of equal parts of white lead and whiting, softened with linseed oil.

For painting interior woodwork the same general principles apply. The three coat rule likewise applies to plaster walls. Plaster really should dry six months before being painted, or it should be artificially aged by treatment with zinc sulphate dissolved in water. The surface should be clean and smooth, all cracks and holes filled with plaster of paris or patching plaster.

Most interior painting is done in flat or egg-shell gloss effects. These are obtained by thinning white lead with flatting oil instead of linseed oil. The finish is rich looking, washable and sanitary.

A wide range of distinctive wall effects are available with Dutch Boy white lead paint. The simple, one-color effects are always in good taste. They may be varied with striping, stenciling and paneling. Then, there are blended, mottled and figured effects in two or more tones such as the Tiffany, Crumpled-Roll and Sponge-Mottled. Each of these finishes is distinctive and original.

Finally, by all means employ an experienced painter. Like good materials, a good painter pays for himself in the long run.

Varnishes, Stains, Enamels

Probably no two products that go into your home are more closely related than paint and varnish, and these products are of unusual importance because they deal with finish colors. The finish of floors, trim, woodwork and other surfaces must be done with the proper materials in appropriate colors if harmony is to prevail throughout your interiors.

On surfaces that are exposed to the elements like exterior doors, or receive hard wear like floors, or which are frequently cleaned like bathroom and kitchen walls, you should use Valspar and Valspar in colors—varnishes, stains and enamels made by Valentine & Company.

Unless finishing materials are the best available, rapid deterioration will result and an early outlay for refinishing must be faced. Experienced home builders and owners usually select Valspar products. The waterproof, weatherproof and wear-resisting qualities of these finishes are known the world over, and they are used in all of the Home Owners' Service Institute demonstration "model" houses.

With Valspar you have a choice of three types of varnish finish: clear, stain or enamel. All are made of Valspar, coloring matter or pigment being added in the case of the last two

mentioned. All are strictly water and weather-proof. When wood is to be finished in the natural color a transparent film of clear Valspar Varnish is used; this gives perfect protection and not even boiling hot water will turn the finish white or injure it in any way.

If you prefer a finish having color and transparency as well you use Valspar Varnish Stain, in oak, mahogany or other fadeless color. If an opaque, solid color finish is desired, no material you can select will give you a wider color range or greater durability than Valspar-Enamel, and if you wish any special tint or shade it may be easily obtained by mixing the standard colors of Valspar-Enamel in various proportions. Thus in Valspar products you have a full line of the best materials for finishing any and all interior or exterior surfaces.

Interior decoration thus begins with the walls, floors, ceilings and woodwork. Wallpaper, paint, varnish and enamel are the means most generally used to finish these surfaces which are backgrounds for furniture, rugs, drapes and decorative accessories.

Good Finishing Materials

A house is both a structure and a home. As a structure it gives shelter; as a home it is an interpretation of the personalities living within. Its interior decorations are outstanding influences in determining the commercial, artistic and sentimental values of the house. In creating decorative effects wall treatment is the most important influence. If is the motif of interior decoration; the setting on which every other attribute must be based. This is why wallpaper of good design and coloring is a hallmark of taste, and why its selection should be made with the utmost care.

The quality, coloring and design of your wallpaper are of supreme importance. Beauty is the key for it combines these elements with judgment in utilization. In order to obtain the best results in decorative treatment one should plan the entire scheme in advance. Do not start without a definite motif. Consider the following (1) use of each room, (2) size, lines and contents of each room, (3) personality of occupant, (4) source of light and lighting effect desired, (5) relation to other rooms, (6) location and architectural feeling of house and its surroundings, and (7) the house should be a harmonious whole.

In decorating you are dealing in color, and color has a definite effect on people and moods. Wallpaper is one of the most natural, accessible and acceptable means of making a happy distribution of color throughout your home.

Colors may excite, depress, cheer or quiet a person. Colors may apparently alter the proportions of a room; the warm, advancing colors like red make rooms even smaller than they actually are; the cool, retreating colors like blue have the opposite effect. Simple, vertical stripes seem to lift the ceiling higher. In using wallpaper these effects should be calculated. Wallpaper not only gives color and pattern, but also texture, for there are papers that give the feeling of damask, chintz, satin, leather and burlap.

Wallpaper—Color and Design

Wallpaper has behind it the prestige given by centuries of use by authorities and particular hostesses. The designing and making of wallpaper is both an art and a science which finds its highest development in the Muralia Wall Paper creations of the Baeck Wallpaper Company. Select a friendly Muralia pattern for your living room; a more formal Muralia paper for your dining room, and a restful design for your bedroom. Wallpaper is the greatest single influence in the decorative scheme of your interiors. Your wallpaper tells who you are. Muralia wallpapers will make your rooms have the charm and distinction you have long desired.

When considering the interior decorating scheme for your home, it is essential that the floor selections be made a definite part of that scheme. Linoleum floors today are considered also a construction item and factor, entering directly into the building specifications from the very first—a problem coming up before the architect and builder, as well as the decorator.

Four major considerations enter into the selection of the floors for the modern home. First, appearance, which includes suitability to purpose and decorative values. Second, comfort, by which is meant not merely the restful "feel" of the floor, but also the ease and comfort with which it can be maintained. Third, utility, which covers servicability and durability. And finally, economy, that is to say, moderate first cost and per-year cost.

For these four fundamental requirements of good flooring, Nairn Gold Seal Inlaid Linoleums, made by the Congoleum-Nairn Company, are ideal. In beauty and variety of patterns and color combinations this type of floor-covering is second to none—assuring a wide choice of decorative floors suitable to every room in the house and harmonizing with every type of architecture. This comprehensive variety of patterns is so important a consideration now that decorators—both professional and amateur—are using many patterned floors to give the rooms character and individuality, and also to furnish the basis for the decorative plan.

From the standpoint of comfort, there is nothing more desirable than "living" with the floors of Nairn Gold Seal Inlaids. They are so quiet and easy to walk on as rubber heels—a feature which makes a favorable impression on guests and reacts healthfully on the nerves of the whole family, especially the houseworkers who may be on their feet all day.

Linoleum for Various Rooms

Floors of Gold Seal Inlaids do not require extreme care. They are not easily marred and the beautiful colors do not fade, as they go through to the burlap back. Water-resisting by nature and well waxed when laid, these sanitary floors collect nothing which cannot be quickly removed with a damp, or "dustless" mop. Occasional light waxing is all the maintenance and upkeep they require. Then too they insulate your floors against heat and cold.

Considered from the standpoint of utility and economy, Gold Seal Inlaids find much favor with the modern home builder. They are practically permanent—do not need to be taken up and renewed like a carpet—never require expensive finishing. Thus their first cost is practically their own cost, and even this much lower than is generally supposed.

These inlaids are made in two types of patterns. Belflor patterns are made up of softly mottled tiles, sometimes combined with solid color tiles and separated by contrasting interliners. They may be used in any room in the house. Universal patterns are in the clean-cut solid color tiles, cheerful colorful effects that are popular for kitchen, pantry and bathroom.

Gold Seal Inlaids have been specified for various floors in the rooms of the demonstration "model" homes by the Home Owners Service Institute.

Planning the Complete Interior Scheme

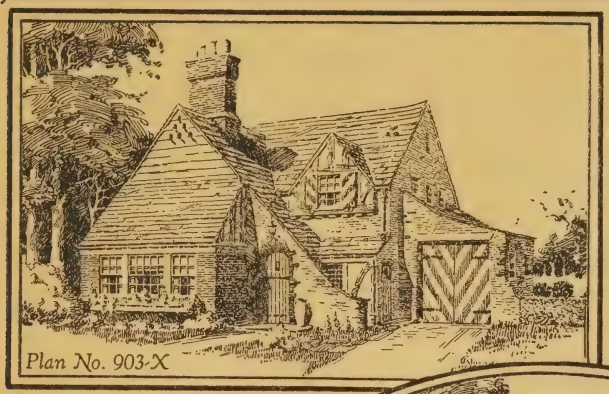
These are thrilling days. Our ideal of Home is taking concrete form. Our own door key is in our pocket. We are experiencing the pride of possession. We are decorating—putting the stamp of our own personality into the house; making it into a home, laying the foundation of the sentimental value which the passage of time will so enrich. This experience is one of the high spots in life.

The wallpaper is being hung; the finishing coats of paint and varnish have been applied. At this point we are concerned with furnishings—such things as window shades, furniture and rugs.

It is not for us to dictate how you shall furnish your home; that is a matter of personal preference, finances, architecture and other influences to determine. Perhaps, however, we can help you, through three specific suggestions, to arrive at happy solutions for these problems. The products we are about to refer to are all made by E. I. du Pont de Nemours and Company.

The first has to do with the regulation of light entering the room by window shades. Shades are important for they allow privacy and help to determine the appearance of the whole house, both outside and in. Shades must be durable; cracks, "pinholes," frayed edges and rain spots destroy appearance and usefulness. The remarkable new du Pont Tontine window shades are both durable and good looking, because the cloth composing them is impregnated with a pyroxylin material like Duco. They are washable so the owner need have no fear of dust and dirt; a season's dirt is easily removed with a medium stiff brush, soap and water. They are furnished in twenty-four colors. Tontine shades are the most economical shades you can buy.

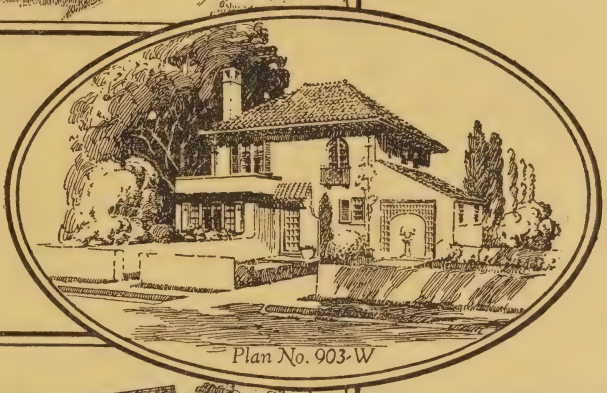
The second item for a truly modern home is Duco finished furniture. Furniture can now be purchased in your own town finished with beautiful, enduring Duco which gives



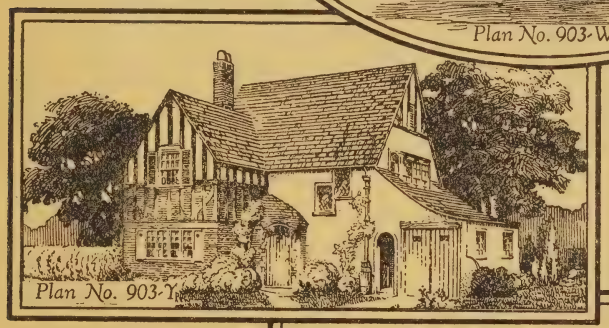
Plan No. 903-X

A distinctly different design, borrowed from the Elizabethan English. The broken and sweeping roof lines and use of half-timber decoratively in the walls of common brick, combine to create an exceptional exterior. (Plan No. 903-X, at left.)

Italian architecture is popular. This house resembles an Italian villa, the details of roof, doorway, windows, chimney and grilled iron and lattice work being distinctive—built of stucco on hollow building tile or frame. (Plan No. 903-W, at right.)



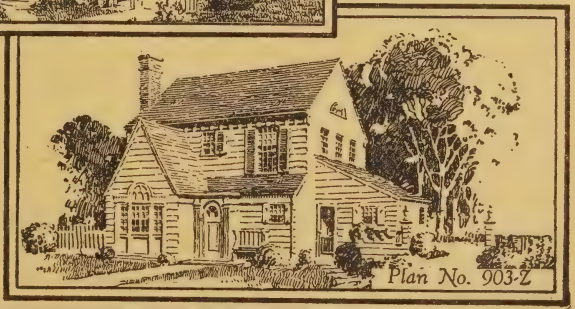
Plan No. 903-W



Plan No. 903-Y

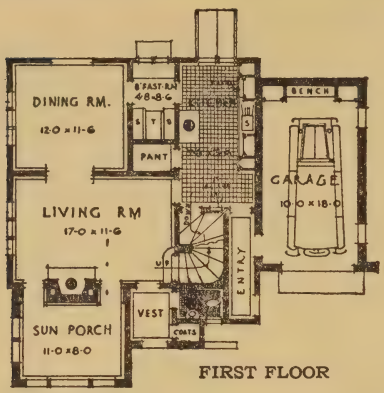
Another English adaptation from the Elizabethan, with striking half-timber effects at gable ends. For construction or wood framing with brick veneer, stucco and wood timbers in combination. (Plan No. 903-Y, at left.)

A modernized English Colonial frame home, with exterior walls of wide wood siding or shingles. The details of wood trim are pleasing and truly Colonial. Suitable for city, suburb or country. (Plan No. 903-Z, at right.)

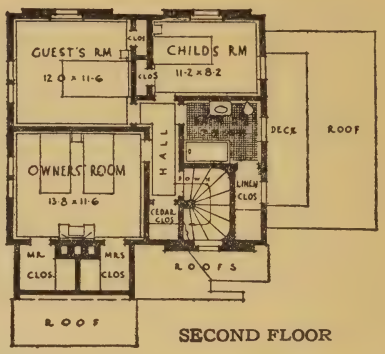


Plan No. 903-Z

Sixth series of houses built in 1926 National Demonstration "Model" Homes Campaign. Nos. 903-W, 903-X, 903-Y, 903-Z. Floor plan, description on next page.



FIRST FLOOR



SECOND FLOOR

Inspired by a Magazine's Home Series

Nation-wide interest was manifest in the four Liberty Weekly homes recently built throughout the country, with the cooperation of the Home Owners' Service Institute. Liberty's Home Owners' Bureau is a department now supervised by the Institute.

Plan No. 903-X has been designed for our National Demonstration "Model" Homes Campaign by Henry G. Jefferson, architect, of Bronxville, N. Y. It is only a slight modification of the design for Liberty's Bronxville house which he planned as his own home, in which he now lives. Mr. Jefferson, consulting with the Institute's architect, Arthur Bates Lincoln, also drew up the three other exteriors to fit this very practical floor plan—the one most liked in the Liberty series for 1926.

A feature is the increasingly popular attached garage. Slightly different window openings and locations only alter the four floor plans on the interior walls. There is a vast difference in exterior architecture and combinations of materials, as described and pictured on the preceding page.

Though the roof lines are somewhat broken, giving added beauty and attractiveness, this is not an expensive plan to build from if you procure the Institute's ready-to-build-from plans and specifications for any one of these designs—or others illustrated in this manual. The plan above is suited for a corner lot or an inside location with a fairly wide frontage, in city, suburb or the country.

Full directions for obtaining complete blue print working drawings and specifications, ready to build from, will be found on page 44.

absolute protection against children's play, careless servants and other mishaps. When one buys furniture finished with Duco they secure enduring beauty in the finish and save many dollars in refinishing and replacements.

The third product is the du Pont Rug Anchor. A well placed rug of pleasing pattern adds warmth and coziness to a room especially if it is on a hardwood floor. The hazard of a slipping rug is now eliminated by simply placing a piece of Rug Anchor under the rug. This will always keep it in place even while it is being vacuum cleaned. No fasteners of any kind are required, and neither the floor nor the rug is marred or harmed in any way. In fact the Rug Anchor greatly prolongs the life of rugs.

At this stage of our building, while we are giving consideration to the fascinating details of decorating and furnishings, we must also ponder the practical and no less important service portions and equipments—the gas range, the electric clothes washer, the electric or gas refrigerator, the electric vacuum cleaner and the radio.

Service Portion Equipment

Reference has already been made in this manual to gas service systems that provide a maximum of comfort, convenience and economy, now let us consider in some details the numerous changes and improvements in gas range construction. Today the gas range is offered in so many different types and designs, that every need has been anticipated.

The two most important improvements are the closed-top gas range and the oven heat control, both of which are found in the Smoothtop gas range, made by the Standard Gas Equipment Corporation.

The closed-top range resembles the working top of the coal range and is provided with lids above the cooking top burners. Due to the absence of projections or other obstructions, cooking utensils may be moved about without tipping or spilling. These lids, which rest on fingers cast on the underside of the top, can be removed so that a pot or pan may be placed directly over the open flame.

Because of the special burner construction in the Smoothtop range, one burner will keep four pots boiling; this construction solves the problem of keeping food ready for service —the solid top with one burner turned low does the trick indefinitely.

The advantages of oven-heat control are known to every housewife. This efficient device enables the cook to be out of the kitchen while the meal is being cooked. It eliminates guesswork and helps mightily in securing perfect results. It is only necessary to set the temperature control at the proper heat for the food being prepared.

The closed top range, like the open top range, is made with the ovens and cooking top in various positions. The difference between these two types is primarily in the construction and size of the cooking top.

Gas Range Satisfaction

Compactness in design, elegance in appearance, ease of adjustment of all governing devices and interchangeable parts are factors that have been elaborated to a high degree of perfection in the Smoothtop gas range.

A gas range should not only give a maximum of satisfaction in use, but should also be readily replaced in the event of accidental breakage when this occurs for unforseen or unusual causes. Ordinarily, there is almost no liability to breakage or of parts getting out of repair. When on rare occasions, this does occur, the parts should be readily repaired and replaced. This is most easy when the manufacturer of the stove, such as the Smoothtop, has nation-wide distribution and responsible representation in all established communities of gas users. With such manufacturers the rapid sale of goods, owing to established reputation, honest advertising and fair trade relations with distributors and public, ensures a dependable product at a reasonable price.

Quite as important as the gas range, and becoming more important as the circle of the housewife's interests broadens and more demands are made upon her time and energy, is the electric washing machine, another of the service units standard in the equipment of the National Demonstration "Model" Homes Campaign houses.

Equipment of the laundry should be chosen with the idea of permanency. Built-in laundry tubs are as necessary these days as a bathroom, and the electric washer is fast going into the same class.

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The Graybar Clothes Washer, backed by the Graybar Electric Company, which is part of the laundry equipment of these "model" homes, has passed the most rigorous tests. It is backed by a company with over half a century of electrical experience, and it has been tested and approved by the New York Herald-Tribune Institute, the Good Housekeeping Institute, the Modern Priscilla Proving Plant, the Homebuilders' Exhibits, and the Home Owners' Service Institute.

The appearance of the Graybar Clothes Washer is exceptionally attractive. All mechanism is concealed by smooth, straight panels, which protect the user from contact with oily, moving parts. These panels are finished in a soft, gray enamel. The top and cover are aluminum, the control levers, nickel. It operates on the revolving-reversing cylinder principle.

The clothes are put into the smooth rust-proof cylinder, the perforations in which are beaded and sunk in the corrugations so they do not come in contact with the clothes. The cylinder revolves, reversing every six and a half turns. This action forces the water through the clothes again and again, carrying away all the dirt, without rubbing or scrubbing the fabrics. Everything from the daintiest lingerie to the heaviest blanket is thoroughly washed in the Graybar without wear and tear.

Electric Clothes Washer

The washer may be placed against either right or left laundry tub, which ever is more convenient. Control levers can be reached from any position. The wringer swings and locks into any one of eight operating positions and can be used effectively in any of these positions. The powerful motor will operate both cylinder and wringer at the same time, so that while the second lot is being washed, the first lot can be wrung from the first rinse to the bluing and from bluing to basket—this is a time-saving feature. When washing "extras" such as blankets, lace curtains and bathrugs, the machine itself can be used for the rinsing as well as for the washing.

The motor is protected from overload by two separate friction clutches, one for the wringer, one for the cylinder. The safety release on the wringer releases tension on the rolls instantly. Draining is handled through a floor drain a few feet from the tubs. The easiest method of filling the washer is by attaching about five feet of garden hose to the tub faucet. The electric cord on the motor is connected with a convenience outlet which has been provided for in the wiring. The electric cord on the Graybar is rubber-covered, an advisable feature as there is bound to be a certain amount of dampnesss.

The third item in service equipment to be considered is the refrigerator, not the old sort with its clogged drain and dripping ice, but the modern, standard electric equipment. Electric refrigeration is an item of prime importance in home-life as we now know it.

Plan for Electric Refrigerator

Installation of Servel Ideal Electric Refrigeration, made by The Servel Corporation, is a logical part of efficient home management. The firm, crisp freshness of fruits and vegetables, the savory frozen dainties and delightful desserts made possible by the new electric cold suicine, sparkling ice cubes made from water of your own selection, all these tend to place the hostess in high favor.

Servel provides pure, dry, clear cold, always below the danger point of 50 degress, and faithfully guards the health of you and yours, every hour, summer and winter. And, financially speaking, it is within the means of every home. First cost is surprisingly small and operating expense is lower than the inadequate methods of the past. How our mothers would have blessed this equipment which you may so easily enjoy!

Servel is the first large manufacturer to benefit from the value and advantage of methyl chloride as a refrigerant, which has an exceptionally high efficiency and is harmless, colorless and without disagreeable odor. It is non-corrosive and because its liquid vaporizing point is so low, it is unnecessary to create a vaucum in any part of the Servel system. Consequently Servel is not subject to leakage of air into the system.

Operation is uniform, with a minimum number of starts and stops. Its expansion coils are immersed and sealed in alcohol and water, and this non-freezing solution provides a "hold-over" capacity; it acts as a temperature stabilizer and reduces the number of operating periods.

Operation is controlled by the pressure of the expanding methyl chloride. The pressure control mechanism is combined with a positive throttle, which insures a uniform flow of vapor to the compressor, eliminating overloads and making operating conditions ideal at all times.

Servel has been tested and approved by the National Board of Fire Underwriters, the National Electric Light Association, New York Herald-Tribune Institute, Good Housekeeping Institute, the Modern Priscilla Proving Plant, the Homebuilders' Exhibits, the Home Owners' Service Institute, and other similar groups interested in protecting the public.

There are now seven styles of Servel refrigerators, complete with Servel refrigerating units, so no matter what your particular needs may be, there is a Servel that will fit them perfectly. Each refrigerator cabinet is insulated with sheet cork and finished with Duco. The Servel domestic refrigerating machines may be installed in any domestic refrigerator regardless of size, type or make.

The various Servel models run from 61 to 75 and $\frac{5}{8}$ inches in height, from 27 and $\frac{3}{8}$ to 47 and $\frac{1}{4}$ inches in width, from 23 and $\frac{7}{8}$ to 26 inches in depth. They provide from 40 to 100 ice cubes and have food storage capacity from five to twelve cubic feet.

Approved Appliances

Just as the electric clothes washer has taken the drudgery out of washing and the electric refrigerator has taken all annoyance out of the ice box, so has the vacuum cleaner done its large share to put home keeping on the same plane of efficiency as characterizes office routine.

No matter how simple or how elaborate your home furnishings are, you have selected them carefully, invested much money in them and they represent an ideal in beauty, and as such they deserve care that will preserve and protect them through a long life of usefulness.

Cleanliness is the most important factor in preserving rugs, drapes and upholstery; and naturally, every home maker prides herself on her cleanliness. But what a difference between the cleaning labor and the resulting cleanliness of yesterday and of today! Not many years ago, in the most carefully kept homes the annual removal of carpets and rugs revealed a shocking accumulation of dirt. Today, no housekeeper would tolerate such a condition—she keeps her floor coverings cleaner than her mother ever dreamed was possible. The secret, of course, is the electric vacuum cleaner.

Some women believe that no matter what vacuum cleaner they use on their rugs, results will be the same. Nothing could be more erroneous. There are three types of dirt in floor coverings: (1) light, surface dust; (2) stubborn-clinging lint and threads; (3) dangerous, destructive, germ-laden embedded grit.

Some cleaners depend entirely upon air suction to remove dirt; naturally these reach only the dirt nearest the surface. Other cleaners have a brush which sweeps up lint and threads.

Electric Suction Sweeping

But there is only one electric cleaner which removes all three types of dirt. Only the Hoover, made by The Hoover Company, combines the three essentials of thorough rug cleaning, sweeping, beating and suction. Not only does it remove surface dirt and lint, but it also dislodges, by beating, the most deeply buried dirt, the dangerous, germ-carrying, rug-destroying grit. This is the dirt, which, buried deep in the rug, cuts off the nap and makes rugs wear out years too soon.

Only by the removal of this sharp, cutting grit are rug fibres protected and rug-life lengthened. Reaching this "unreachable" dirt has long distinguished the Hoover. Fine as this machine has always been, now a new cleaning principle, "Positive Agitation," has brought about, in the Hoover, an increase in cleaning ability, in ordinary cleaning time, of 131 per cent. This is a revolutionary improvement. It anticipates all previous standards.

The Greater Hoover, as the new model with "positive agitation" is called, cleans floor coverings, drapes and upholstery more thoroughly and more easily than was thought possible a short time ago. The saving in wear that results from this new cleanliness is very great. This new model embodies every refinement cleaning experts have devised and found practical. Every consideration has been given to quality, service and convenience by the makers of the Greater Hoover. The dust bag is washable. No parts, not even the

motor, require oiling. The efficiency of the dusting tools is increased 50 per cent. The Greater Hoover is the vacuum cleaner for your home.

The last item of service equipment which we have to consider is the radio receiving set. Radio deserves a place in every home. It is not a luxury. Amusement is just as necessary to normal, rounded life as is food. The radio set means both amusement and education. Mechanical advances and the best the world has to offer in the shape of programs have taken radio out of the non-essential class and made the receiving set standard equipment for the home.

Ordinarily the set will be placed in a corner of the living room where the family gathers in the evening. In appearance the set should harmonize with its surroundings. This is not difficult for from among the many sets now on the market made by the Crosley Radio Corporation there is a wide variety from which to choose.

There are self-contained dry battery sets, the batteries inside the cabinet. There are compact cabinets to be placed on tables. There are the console models which incorporate the loud speaker and all accessories in a graceful cabinet.

Provide for Radio Receiving

Installation of the set should be done by experienced radio men for performance depends largely upon the installation. The aerial may be stretched outdoors in an inconspicuous place. The lead wire from the aerial may then be run into the house and down inside the walls, to an electric socket in the baseboard of the living room. Likewise the ground wire may be run inside the walls to a baseboard socket. If dry batteries are used, they will probably be placed inside the set, or in a separate cabinet or console. Storage batteries should be placed in the cellar, the heavy lead wires being carried between the wall partitions, as in the case of the aerial and ground lead wires. Thus no wiring or parts will be exposed to view, nothing will be visible but the set itself.

Many home owners prefer console equipment for their radio, with the speakers built into cabinets. Others prefer to use separate speakers. A musicone speaker may be placed on the mantle, the library table, a bookcase or in any other convenient location with certainty that it will harmonize with its surroundings. Thus, by using a separate speaker with a considerable length of cord the speaker may be so placed as to improve reception through taking advantage of the acoustics of the room. Experimenting will show that one location is preferable to any other.

Since the announcement of the new Crosley four-and five-tube sets their popularity has grown by leaps and bounds. These sets are manufactured in a variety of models adapted for home use, in both compact table type and Console models with built-in loud speakers. They are priced moderately so as to be within reach of any house owners.

* * * * *

With these essential pieces of home equipment we are concluding the general text of "A Manual of Home Building." Remember that most of the mistakes which have been made by home builders and buyers are due primarily to lack of proper preparedness, false sense of economy in selecting materials and equipment, and carelessness in making business arrangements relative to financing and contracts. If you follow this manual as a guide and safeguard, the home you ultimately own should be all that you have dreamed it would be.

The "Why" of the Institute

—*its aim, object and purpose, and its accomplishments during the past five years*

THE aim of the Home Owners' Service Institute, the object of this manual, the purpose of the 1926 National Demonstration "Model" Homes Campaign, and our educational work generally is to create the desire for better built homes where happiness and contentment will reign. The Institute is endeavoring to obtain the widest possible circulation for its service features so that its aim, object and purpose will become even more generally known.

In the spring of 1921, when rents were high and apartments scarce in New York City, and the housing shortage was a national menace, the Home Owners' Service Institute was organized as a cooperative educational movement to provide information and expert advice on any and all problems affecting the planning, financing, building or buying of homes.

That famous newspaper—the New York Tribune, founded by Horace Greeley, now the combined New York Herald Tribune—recognizing this great need secured the services of L. Porter Moore, President of the Home Owners' Service Institute, in the spring of 1922 to edit each Sunday an entire page devoted to moderate size house designs and educational articles dealing with home building and buying. During the 1922 season the Home Owners' Service Institute and the New York Tribune carried this work a step further and sponsored six demonstration "model" homes built from plans published on this Sunday feature home page.

This first home was opened at Larchmont Gardens, N. Y., on October 9, 1922, celebrating Better Homes Week in America. By the end of 1926, fifty demonstration "model" homes will have been exhibited in and near New York City by the Institute and the New York Herald Tribune.

Since then the Institute has been called upon to assist in the planning and building of several internationally-known model homes. In the spring of 1923 the Institute provided the funds and contributions of materials for the construction of a modernized replica of the home of John Howard Payne to commemorate the one hundredth anniversary of the writing of his immortal song, "Home, Sweet Home", and as a National Better Homes in America demonstration. The house was built at Washington, D. C., in the shadow of the White House, and was officially opened by the late President Harding. It is now the Washington headquarters of the Girl Scouts of America.

Famous "Model" Homes

In 1925 the Institute likewise helped to provide the funds and materials for the American Committee to build and completely furnish and equip a typical modern American home as a gift to the French government, Department of Public Instruction. "The American Home" was first demonstrated to the public in Brooklyn, N. Y., and then rebuilt in Paris, France, in connection with a governmental educational exposition.

In 1926, the "Save the Surface" Home at the Sesqui-Centennial Exposition, Philadelphia, Pa., was built with the cooperation of the Institute. This year the Institute is cooperating with Liberty magazine, among other publications, in the building of the "Liberty Model Homes." The "Lehigh Prize Homes" being constructed throughout the country by the Lehigh Portland Cement Company were completed with the cooperation as the Institute.

Now the 1926 National Demonstration "Model" Homes Campaign will eclipse all previous efforts of the Institute to carry the message of better homes to millions of persons. In a minimum of twenty-eight cities its demonstration model homes will be built, with the cooperation of a leading newspaper.

Thus the extensive educational service and home building program as originally sponsored by the Institute and the New York Tribune is now extending throughout the nation, with the aid of other newspapers and magazines. In the short space of five years the Home Owners' Service Institute has become the largest architectural plan service in the world, and a leading factor in the better homes movement.

Select "Buildable" Home Plans

—practical plans only, of homes previously built and lived in, are illustrated in this book

WHEN are you going to build your own home? This year? Next? Some time indefinitely in the future? Or are you preparing to buy a home? If you have any intention of building or buying at all, here is what you should do right now: Get Volume I of "The Books of A Thousand Homes."

From this plan book, published by the Home Owners' Service Institute and edited by Henry Atterbury Smith, one of New York City's most prominent architects who is internationally famous as a housing and city planning expert, were selected the houses and bungalows built for the National Demonstration "Model" Homes Campaign. The third printing of this best selling architectural plan book is just off the presses.

It is a book of small and moderate size house plans that is entirely different from anything of the sort ever published before. It contains floor plans, perspective drawings, detail sketches and photographs—more than 2,000 pictures—and cost estimates for not twenty-five, fifty or a hundred but five hundred homes which can be economically built. The size of these homes ranges from three to eight rooms.

If you are going to buy a home, in Volume I of "The Books of A Thousand Homes," you may study various types of architecture, building materials and room arrangements to the greatest advantage. Its possession will be of real help to you in deciding exactly what kind of a house or bungalow you want to buy.

Among the five hundred plans there is an almost infinite variety. There are homes of stucco, brick, frame, hollow building tile, shingle, concrete block, stone and various combinations of the popular building materials of today.

And for every plan in the book—as for the twenty-four designs pictured in this manual and being built in the National Demonstration "Model" Homes Campaign—there are blue print working drawings and detailed specifications easily available, ready to build from. There is no guess work. You can turn these plans right over to your local contractor and let him go ahead with the building. He cannot make a mistake.

From America's Foremost Architects

The architects whose work this book contains are the best in America, men who could not undertake an individual commission to design a house for less than an average of $500.00. They have given their services, through the Home Owners' Service Institute, for the sake of the builders of small and moderate size, comparatively inexpensive homes who want the best of everything at minimum cost. The name of the Editor—Henry Atterbury Smith—is in itself a guarantee of excellence. In the revision of the second edition for the third printing of Vol. I of "The Books of A Thousand Homes," Arthur Bates Lincoln, architect for the Institute, has collaborated in its final re-editing for this new printing.

Even as a book it is worth owning for it is a beautiful example of the publisher's art of printing and binding, containing 324 pages, with many of its more than 2,000 pictures printed in two colors, and the cover printed in four colors—size 9 x 12 inches—bound in cloth and heavy board. There are also nearly fifty pages of valuable information for the prospective home builder or buyer, including articles on architectural plan reading, estimating local construction costs by cubic footage method, estimating financing and maintenance cost, letting building contracts, and chapters on various types of materials and equipment.

The book is a decoration on any living room table, a valuable addition to anyone's library, and will be an inspiration to its owner. If your bookseller does not stock it, just write to Home Owners' Service Institute, 441 Lexington Avenue, New York, enclosing three dollars—check, money order, or bills—and it will be mailed to you, postage prepaid.

—the Home you want to build can surely be found in this plan book

Volume I

of

"The Books of a Thousand Homes"

is the best selling plan book
in the world

Third Printing Now Ready

Contains 500 Plans

of 4-room to 8-room practical designs in frame, brick, stucco, hollow tile, concrete block, shingle, stone

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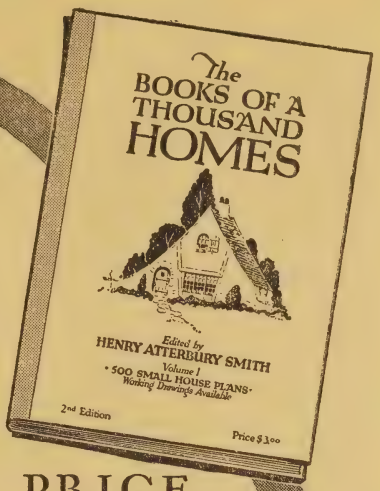

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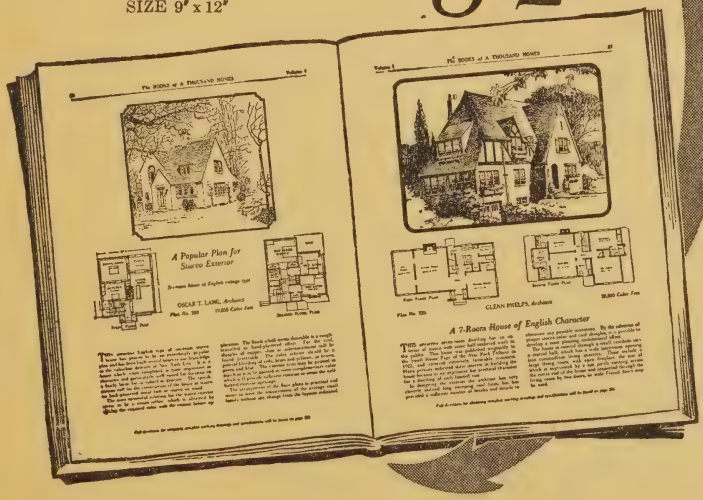


The book open showing plan pages

From Plan Book to "Livable" Home

—protecting your home building project demands practical plans and specifications

FROM plan book to "livable" home—one of the most practical forms of service which has been made available to the prospective builder of a moderate cost home in recent years is the provision at low cost of dependable plan in blue print form, ready to build from, and specifications complete and practical for actual construction.

During the past few years the imperative public demand for good "livable" house plans has been shown by the fact that more than a million plan books have been bought by those who have wished to obtain definite ideas and suggestions when studying the problem of moderate cost home building. In its first printing one hundred thousand copies of this booklet, "A Manual of Home Building," have been published, illustrating the twenty-four practical designs of houses constructed during the 1926 National Demonstration "Model" Homes Campaign.

On the preceding page, Volume I of "The Books of A Thousand Homes" was described. Following will be found a complete description of the proper use of both this manual and the more complete plan book containing five hundred moderate size home designs, and the service made available by the Home Owners' Service Institute and its Cooperating Manufacturer Members so that you may either build your own home, with the assurance of having plans that are absolutely dependable and "buildable" at nominal cost.

The first step is to select from the wide range of plans shown in Volume I of "The Books of A Thousand Homes" one which meets the requirements of the builder—or one from this manual. With each plan published therein the number of cubic feet contained in the house is clearly stated and approximate construction cost in any given community can be easily estimated therefrom. This makes it easy for the home seeker to figure whether or not a certain plan desired can be properly financed and built at a cost within his means.

Plans Ready To Build From

As shown on the opposite page, a complete set of plans as supplied by the Home Owners' Service Institute contains all of the necessary working documents, three in number, as follows: (1) Completely detailed blue print working drawings, as prepared by the architect; (2) complete specifications, calling for the materials and equipment used in constructing our demonstration "model" homes; and (3) a legal form of contract between the builder and the owner. This set is all your builder requires to go ahead and construct your home therefrom.

It is important to realize that this service is made complete by the additional feature of a one-year membership in the Home Owners' Service Institute which is included free with each set of plans and specificatons. An engraved Membership Certificate (as illustrated) is issued in your name entitling you to expert advice by correspondence with the Institute on any individual problems relating to home building or buying.

In addition, each purchaser of a set of plans and specifications receives free our "Own Your Home" Service Library consisting of fourteen different Educational Text Units—providing unbiased information and expert advice, prepared by nationally recognized authorities, on planning, financing, building, buying, equipping, landscaping, and a variety of subjects—used by several universities, real estate boards, Y. M. C. A. schools, National Thrift Week committees, and others in connection with educational courses. This library of fourteen booklets is also pictured on the opposite page.

The price for complete plans and specifications of any design, together with all documents, including the "Own Your Home" Service Library, and one-year membership in the Institute, is only $25.00. If additional sets of plans and specifications are needed these sell at $5.00 per set. Plan sets on linen, if required, together with regular specifications, sell at $27.50 on special order.

—free with each complete set of working drawings and specifications

One Year Membership

IN

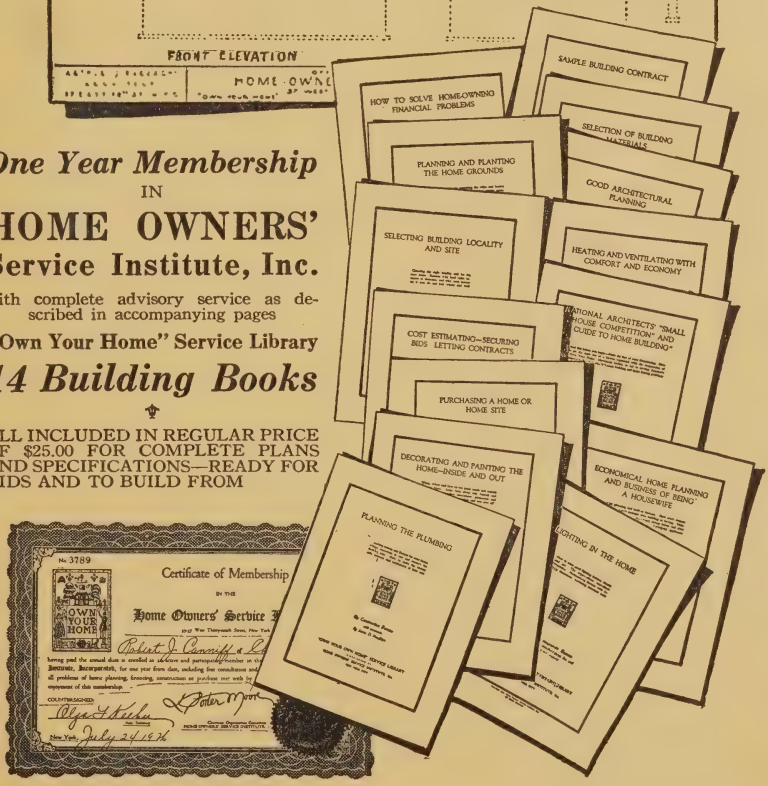
HOME OWNERS'
Service Institute, Inc.

with complete advisory service as described in accompanying pages

"Own Your Home" Service Library

14 Building Books

ALL INCLUDED IN REGULAR PRICE OF $25.00 FOR COMPLETE PLANS AND SPECIFICATIONS—READY FOR BIDS AND TO BUILD FROM


SAMPLE BUILDING CONTRACT
HOW TO SOLVE HOME-OWNING FINANCIAL PROBLEMS
SELECTION OF BUILDING MATERIALS
PLANNING AND PLANTING THE HOME GROUNDS
GOOD ARCHITECTURAL PLANNING
SELECTING BUILDING LOCALITY AND SITE
HEATING AND VENTILATING WITH COMFORT AND ECONOMY
COST ESTIMATING—SECURING BIDS LETTING CONTRACTS
PURCHASING A HOME OR HOME SITE
DECORATING AND PAINTING THE HOME—INSIDE AND OUT
ECONOMICAL HOME PLANNING AND BUSINESS OF BEING A HOUSEWIFE
PLANNING THE PLUMBING
LIGHTING IN THE HOME
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Home Owners' Service
OWN YOUR HOME
July 24 19

The "Safeguard" Policy Proves

—why a certified Safeguard Policy recording all materials and workmanship is invaluable.

AVERAGE American families build or buy homes only once or twice in a lifetime. It is usually the most important investment they ever make. Yet, heretofore, they seldom knew much about the house they bought. Even an expert could not find out all the facts about a house, once it was finished and many of its most important parts covered up. How much less could the inexperienced home builder or buyer discover!

Here and there an unscrupulous builder thrived on this situation. He built homes that looked fine—but were not worth the price asked. They would be cold in winter, hot in summer, and expensive to heat and keep in repair. Often such a house overwhelmed the trusting buyer with unexpected upkeep cost, and soon was worth little. Loan and mortgage value and resale value were virtually nil.

Meanwhile, the thousands of good honest Realtor Builders and other reliable contractor builders had to suffer in silence. It was hard for them to meet the prices of the unconscientious, and they had no way to prove their better houses were worth more.

For these reasons the Home Owners' Service Institute has determined to do all in its power to encourage the use of the Home Owners' Safeguard Policy. A completely filled out, signed and sworn Policy is furnished with every model home built under our plan.

The Home Owners' Safeguard Policy fills a long-felt need in the home building field. For the first time it provides a printed form on which the materials, equipment and methods used in building a house may be conveniently and accurately recorded. This record is filled in and signed by the builder, then sworn to before a Notary. The homeseeker can inspect the detailed record of materials and workmanship. He can discover what kind of insulation was used, if any. He knows how many coats of plaster were used, even though he cannot really "see" them. He can tell whether adequate foundation footings are under the basement walls, even though they are hidden far underground.

Policy Informative and Protective

Each and every sub-contractor who performed part of the work on the house has signed the Safeguard Policy "Construction Chart," opposite the record of his particular materials and workmanship. Thus, each craftsman is given recognition and identity. The result is a greater pride in good workmanship, and unwillingness to do the kind of work which he would not want to sign his name to.

Best of all, the Safeguard Policy record shows who made the materials and equipment built into every part of the house. Therefore, you can tell whether the house is an assembly of justly famous brands, made by manufacturers with a reputation for quality—or whether unknown brands of doubtful quality were used in an effort to build the house as cheaply as possible.

The builder or owner of a house finds that a Safeguard Policy record of its materials and workmanship helps him sell it. The Policy creates confidence in the buyer by showing him, in detail, just what he pays for and what he gets. Many Realtors and professional builders are adopting the Policy as a standard practice and find it an effective selling aid.

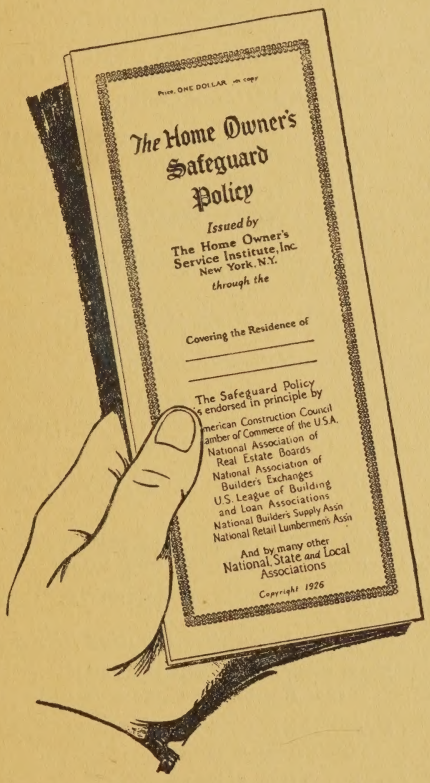
In addition to its recording chart, each Safeguard Policy contains a clear and compact digest of the facts the homeseeker needs to know. This information tells what to look for in buying a house, and explains the vital points so often overlooked by the inexperienced.

Anyone interested in building or buying a house, for themselves or for sale, should write the Home Owners' Service Institute, 441 Lexington Avenue, New York, for a copy of the Safeguard Policy. The standard price is one dollar.

— *be sure your home is protected by the Home Owners' Safeguard Policy*

Your recorded Deed is proof that the property is yours. Your Safeguard Policy is a document revealing the inner character of the home you build or buy, proving its value, certified to by Architect—Builder—Contractor.

Add to your Deed a Home Owners' Safeguard Policy. Value can then be proven along with clear title. This completes your records. You will then always be able to convince anyone that the price asked for your house is justified, because the Safeguard Policy certifies as to quality, materials and workmanship.



Some of the Features of this document follow:

COVER—Provides space for the registration of your name and the authority to issue the Safeguard Policy covering property mentioned.

FIRST PAGE—*Description of Property*—including location, dimensions of lot, dimensions of house, and number of rooms.

FIRST "SPREAD"—Record of property transferrals, depreciation table, proper proportions of lot value to house value.

SECOND "SPREAD" — *Construction Chart* — The certified record of actual materials and workmanship used in your house, signed and certified to by Architect—Builder—Contractor.

THIRD "SPREAD" — *Questionnaire* — the vital questions you should ask before you buy a house already built.

Practical Pointers on Workmanship — in words and pictures this tells the story of good workmanship—revealing the fundamentals—the really important things to look for and demand.

BIG "CENTER SPREAD"—*Master House Standards*—the indexed and itemized specifications for a house of permanence, fire-safety and high resale value. A specimen house is shown in diagram.

LAST PAGE—Directions for use of the Safeguard Policy, and for the use of the full service of the Home Owners' Service Institute.

KNOW WHAT YOU BUY OR BUILD—
DEMAND YOUR HOME BE CERTIFIED
BY THE SAFEGUARD POLICY

PRICE
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Co-operating Manufacturers

—whose quality material and equipment were selected for these demonstration "model" homes

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Tontine Window Shades, Duco Furniture Finish, Rug Anchors

THE FAIRFACTS COMPANY, INC.
Fairfacts China Bathroom Accessories

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G-E Wiring System

GRAYBAR ELECTRIC COMPANY, INC.
Graybar Clothes Washer

THE HOOVER COMPANY
The Greater Hoover Suction Sweeper

THE KELLEY ISLAND LIME & TRANSPORT CO.
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Kernerator Chimney-Fed Incinerator

LEHIGH PORTLAND CEMENT COMPANY
Lehigh Portland Cement

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